# Transportation Concept Report U.S. Route 97

October 2003

California Department Of Transportation

District 2











# Transportation Concept Report United States Route 97

# October 2003 California Department of Transportation District 2

In partnership with Siskiyou County Regional Transportation Planning Agency

The Transportation Concept Report (TCR) is a California Department of Transportation System Planning Document that includes an analysis of a transportation route or corridor. A TCR establishes a 20-year consensus-based concept for how California State highways should operate and broadly identifies the nature and extent of improvements needed to attain that operating condition. Caltrans endeavors to maintain a target Level of Service (LOS) at the transition between LOS "C" and LOS "D" on State highway facilities. A TCR identifies long-range objectives for a route and helps to guide short-term decisions for improvements. It is part of the continuing, cooperative and comprehensive transportation planning process.

### **Additional Information**

For additional information on the Transportation Concept Report for US Route 97, please contact:

California Department of Transportation District 2 Office of System Planning 1657 Riverside Drive (96001) P.O. Box 496073 Redding, CA 96049-6073 (530) 225-3013 or http://www.dot.ca.gov/dist2/

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write:

Department of Transportation Attn: Equal Opportunity Officer P.O. Box 496073 (1657 Riverside Drive) Redding, CA 96049-6073 (96001) (530) 225-3425 Voice, (530) 225-2019 TTY

# REPORT SIGNATURE SHEET

PREPARED BY:	
NICHOLAS DEAL	10/23/03 Date
Associate Transportation Planner CALNET 8-442-0517 District 2 (530) 229-0517	
SUBMITTED FOR APPROVAL BY:	
SCOTT WHITE	10/24/03
Chief, Office of System Planning CALNET 8-442-0518	Date
District 2 (530) 229-0518	
APPROVAL RECOMMENDED BY:	
- Olile	10-24-0 3 Date
RUSSELL A. WENHAM, P.E.	Date
Deputy District Director, Maintenance and Operations	
District 2 CALNET 8-442-3545 (530) 225-3545	
Shriting Charte	10/23/03
SHIRLEY CHOATE, P.E.	<u>Date</u>
Deputy District Director, Program and Project Management	
District 2 CALNET 8-442-2563 (530) 225-2563	
APPROVED BY:	
Barnson	10/24/03
BARRY TIPPIN, P.E	Date
Deputy District Director, Planning and Local Assistance	
District 2 CALNET 8-442-2564 (530) 225-2564	
16 4.1/-	10/24/03
BRIAN F. CRANE, P.E.	Date
District Director CALNET 8-442-3477	Date
District 2 (530) 225-3477	
CONCURRENCE BY:	
CONCORRENCE BT.	
1 Could M. de	11
- Xun poura	10/27/03
BRIAN McDÉRMOTT	Date
Executive Director (530) 842-8250 Siskiver County Transportation Commission	

# TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
PUBLIC OUTREACH AND STAKEHOLDER INVOLVEMENT	9
GENERAL ROUTE INFORMATION	
ROUTE DESCRIPTION	
REGIONAL SETTING	
ROUTE PURPOSE	
FACILITY CONCEPT, DESIGN CONCEPT, AND LEVEL OF SERVICE (LOS)	
ROUTE DESIGNATIONS	
POPULATION, EMPLOYMENT AND HOUSING	15
LAND USE	17
ECONOMIC SETTING	17
GOODS MOVEMENT	
RIGHT OF WAY	21
ACCESS MANAGEMENT	22
ADOPTIONS, RESCISSIONS AND RELINQUISHMENTS	22
ENVIRONMENTAL STATUS	
SAFETY	
MAINTENANCE AND OPERATIONS	23
TRANSPORTATION OPTIONS	23
RELATED FACILITES	
INTELLIGENT TRANSPORTATION SYSTEMS	30
COORDINATION WITH OTHER PLANS	31
ROUTE SEGMENTS	32
SEGMENT FACT SHEETS	38
SEGMENT 1	40
SEGMENT 2	43
SEGMENT 3	46
SEGMENT 4	49
SEGMENT 5	52
SEGMENT 6	55
SEGMENT 7	58
SEGMENT 8	61
SEGMENT 9	64
SEGMENT 10	67
SEGMENT 11	70

# **APPENDICES**

APPENDIX A: GLOSSARY	73
APPENDIX B: PUBLIC OUTREACH PLAN	
APPENDIX C: CAPACITY ANALYSIS AND LEVEL OF SERVICE	83
APPENDIX D ROUTE DESIGNATIONS	85
APPENDIX E: SCENIC DESIGNATIONS	87
APPENDIX F: AIR QUALITY	88
APPENDIX G: ALTERNATIVE FACILITIES NEAR US ROUTE 97	89
APPENDIX H: LOCAL AND REGIONAL PLANS	90
ATTACHMENTS	
ATTACHMENT A: RESOLUTION SISKIYOU COUNTY TRANSPORTATION	
COMMISSION	91
LISTING OF TABLES	
TABLE 1: LENGTH OF US ROUTE 97	
TABLE 2: FACILITY CONCEPT FOR US ROUTE 97	
TABLE 3: US ROUTE 97 DESIGNATIONS	
TABLE 4: US ROUTE 97 SCENIC DESIGNATIONS	
TABLE 5: COUNTY POPULATIONS	
TABLE 6: US ROUTE 97 COMMUNITY POPULATIONS	
TABLE 7: COUNTY JOB GROWTH	
TABLE 8: TOTAL HOUSING UNITS	
TABLE 9: TRUCK LENGTH RESTRICTIONS ON US ROUTE 97	
TABLE 10: TRUCK WEIGHT/HEIGHT RESTRICTIONS ON US ROUTE 97	
TABLE 11: EXISTING RIGHT-OF-WAY ON US ROUTE 97TABLE 12: TRAFFIC COLLISION RATE FOR US ROUTE 97	
TABLE 13: US ROUTE 97 SEGMENTS	
TABLE 14: US ROUTE 97 SEGMENTSTABLE 14: US ROUTE 97 LEVEL OF SERVICE (LOS)	
TABLE 14. US ROUTE 97 LEVEL OF SERVICE (LOS)	
LISTING OF EXHIBITS	
EXHIBIT 1: US ROUTE 97 - DISTRICT MAP	6
EXHIBIT 2: US ROUTE 97 - REGIONAL SETTING MAP	
EXHIBIT 3: US ROUTE 97 - RELATED FACILITIES MAP	26
EXHIBIT 4: IIS ROUTE 97 - SEGMENT MAP	33

# **EXECUTIVE SUMMARY**

# **Introduction**

This TCR contains the vision for the future of United States (US) Route 97 as shared by the California Department of Transportation District 2 (Caltrans), the Regional Transportation Planning Agency, County, cities, local organizations, and the public involved with or affected by US 97. It includes an assessment of the current and future operating conditions on the Route and the improvements that will be necessary to meet identified operational goals. The US 97 TCR is organized into five sections:

Section I: Executive Summary

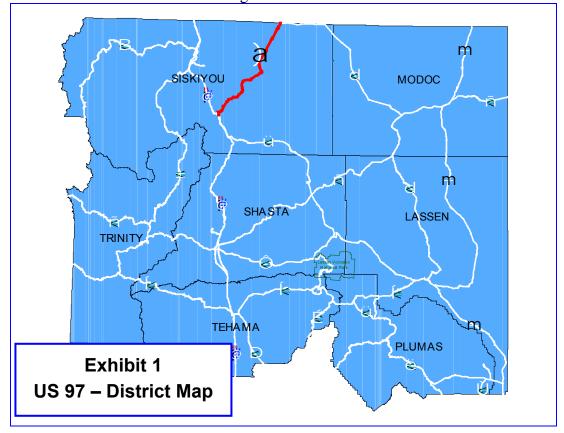
Section II: Public Outreach and Stakeholder Involvement

Section III: General Information
Section IV: Route Segments
Section V: Segment Fact Sheets

Appendix A contains a glossary of the terms used in this TCR.

### **Route Description**

US 97 is a major north-south transportation corridor that connects Interstate 5 (I-5) at Weed, then proceeds north through central Oregon, Washington, and the Canadian Province of British Columbia. At the British Columbia/Yukon Territory border, Route 97 becomes Route 1 and terminates in Anchorage, Alaska. The California portion of US 97 runs from I-5 at Weed to the Oregon Border.



### **Issues and Constraints**

This TCR identifies a number of issues and constraints on US 97. Some that currently exist, and others that are anticipated to arise during the next twenty-years as traffic volumes increase (projected at 1.0–1.5% annually). Issues were identified using a number of methods including capacity analysis, technical studies, meetings with local and regional agencies, and public workshops. The issues and constraints identified fall into two general categories: capacity (expand the vehicle carrying capability of highway), and operational (enhance/modify operation of the existing highway).

### Capacity

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities. Shown below are segments that will operate at, or below, the concept LOS (C/D) if improvements are not undertaken during the planning horizon (a summary of segment locations and lengths is provided in Table 13 on page 32). When at LOS "D" on a two-lane highway, the typical vehicle is traveling at roughly 75% of the posted speed and following behind another vehicle approximately 75% of the time.

Segments at or Below Concept				
Planning Segments at Concept Year (LOS "C") Segments Below Concept (LOS "C/D" Threshold)				
2002	2, 3, 5 SB, 6 NB, 7 SB, 8 NB	1, 4 SB, 6 SB, 7 NB, 8 SB, 10, & 11 SB		
2012	2, 3, 5 SB, 6 NB, 7 SB, 8 NB	1, 4 SB, 6 SB, 7 NB, 8 SB, 10, & 11 SB		
2022	2, 3, 5 SB, 6 NB, 7 SB, 8 NB	1, 4 SB, 6 SB, 7 NB, 8 SB, 10, & 11 SB		

### **Operational**

The most significant operational issues identified during preparation of the TCR include:

- High truck volumes create delay on uphill grades.
- Left and right turning vehicles cause delay to through traffic in a number of locations.
- Sight distance at a number of intersections.
- Weather issues in the mountainous portions of US 97 cause the highway to deteriorate more rapidly than in other areas.
- Configuration of the SR 265/US 97 intersection can be confusing to drivers.
- Tight turn radius on the southbound I-5 on-ramp in Weed can create difficulty if exceeding the posted speed limit.
- Tight turn radius on the SR 161 free right turn to northbound US 97 can create difficulty for vehicles exceeding approximately 20 mph.
- Skewed pedestrian crossing at the US 97/Lincoln Avenue intersection.

### **Proposed Improvements**

A number of improvements have been identified to address the issues and constraints identified during preparation of the TCR. Those improvements fall into two categories: improvements to maintain concept LOS, and other potential improvements.

### **Improvements to Maintain Concept LOS**

- Segment 1 reconfigure US 97/SR 265 intersection in Weed to allow continuous flows on US 97 (stop-control on SR 265). Currently programmed as part of the Downtown Weed Rehabilitation project.
- Segment 1 improve operational issues associated with low average travel speeds.
- Segment 2 increase capacity by expanding to a four-lane facility sometime after 2012.
- Segment 2- construct a pedestrian overhead (OH) at Lincoln Avenue in conjunction with any capacity increasing project (would require a State/Local partnership).
- Segment 4 SB extend passing lane.
- Segment 6 SB extend climbing lane.
- Segment 7 NB extend climbing lane before Mount Hebron Summit.
- Segment 8 SB extend climbing lane before Mount Hebron Summit.
- Segment 10 highway realignment in Dorris (project abandoned in 2003).
- Segment 11 SB extend climbing lane north of Dorris, at Dorris Hill.

### **Other Potential Improvements**

- Modification to the pedestrian crossing at the US 97 / Lincoln Avenue intersection. Future development west of US 97 could necessitate improvements to the highway through mitigation, such as traffic signals, pedestrian undercrossing or overcrossing, and in-roadway-warning-lights.
- Additional passing opportunities south of Macdoel.
- Additional passing opportunities south of County Road A-12 toward Weed.
- Reconfigure the US 97/California Street intersection to reduce skews.
- Right-turn deceleration lane on southbound US 97 at Big Springs Road.

Completion of the above improvements will help Caltrans and its transportation partners ensure that US 97 meet the needs of local and interregional travelers through the year 2022. Some of the proposed improvements have the added benefit of helping local and regional agencies meet other planning and development objectives. Implementation of many of the improvements will require funding and delivery partnerships between Caltrans and its local and regional partners.

# PUBLIC OUTREACH AND STAKEHOLDER INVOLVEMENT

Development and approval of the US 97 TCR involved a variety of stakeholders at the Federal, State and local level, including: the Siskiyou County Regional Transportation Planning Agency, cities, County, economic development and business interests, resource agencies, Native American communities, and the general public. Diverse and ongoing involvement was necessary to help ensure that the TCR identified and addressed the needs of the system operators, users, and the environment affected by the system.

Public outreach and stakeholder involvement was achieved in a number of ways during preparation of the TCR, including:

- Meetings with staff from the Siskiyou County Regional Transportation Planning Agency.
- Meetings/interviews with elected officials and staff from local and State agencies.
- Interviews with representatives from community organizations.
- Phone interviews.
- Two public workshops.
- Presentations to the Siskiyou County Local Transportation Commission.

Some of the key issues identified during this outreach and the manner in which they were addressed are outlined below. For more information on public involvement during development of the US 97 TCR, refer to *Appendix B*.

Selected Examples of Responses to Key Stakeholder Comments			
Issue	Recommendation		
Trucks/RV impacts on traffic conditions	Add passing lanes, turn outs, treated shoulders		
Enhance passing opportunities	Add passing lanes, turnouts		
Deer crossing highway	Vegetation removal, clear recovery zone (CRZ)		
Sight distance	Vegetation removal, clear recovery zone (CRZ)		
Right turn deceleration lanes	Consider in conjunction with other projects		
Improve traveler information	Intelligent Transportation System (ITS)		
Raise/lower speed limit	Outside scope of TCR <sup>1</sup>		
Additional lighting at major intersections	Operational Issue <sup>2</sup>		
Additional pedestrian crossings	Operational Issue <sup>2</sup>		

The California Vehicle Code governs establishment and modification of speed limits. The Department of Transportation has limited discretionary authority in the matter. The issue has been forwarded to the Traffic Investigations Office.

<sup>2.</sup> Issues are site-specific and evaluated on a case-by-case basis as warranted or requested by Local Agency.

# **GENERAL ROUTE INFORMATION**

# **Route Description**

US 97 was added to the State Highway System as State Route 72 in 1931. The entire Route was added to the Freeway and Expressway System in 1959 and redesignated as US 97. In District 2, the Route traverses the central portion of Siskiyou County and passes through the communities of Weed, Macdoel, and Dorris.

From south to north, US Route 97 begins in Weed at the Central Weed/I-5 interchange. Before leaving Weed, there is a rest stop 0.4 miles south of Alamo Avenue on California Department of Forestry and Fire Protection (CDF) property, which is maintained by the City of Weed. As travelers head north, Mount Shasta (14,162 feet) and Mount Shastina (12,230 feet) loom large to the right. One mile past County Road A-12 is the Living Memorial Sculpture Garden, a Vietnam War memorial. Twenty miles up the road is the Mount Shasta Vista Point, an area for motorists to pull over for a panoramic view of this scenic mountain. Continuing north, US 97 crosses a high wetland called Grass Lake. Just past Grass Lake is a Safety Roadside Rest Area, which provides motorists a place to stop and rest for short periods. Seven miles farther north is Mount Hebron Summit (5,202 feet).

Past Mount Hebron lies Butte Valley. This valley used to be an ice-age lake, but now the only remnant is a marshy area called Meiss Lake, located west of US 97 at Macdoel. Ten miles north of Macdoel is the City of Dorris. US 97 serves as the main street in Dorris where the highway is constrained by three curves with 15 mph posted speed limit signs. California's portion of US 97 ends at the Oregon Border, south of the City of Klamath Falls.

Beyond California, US Route 97 continues north through Oregon, Washington, British Columbia, and the Yukon Territory before officially terminating in Anchorage, Alaska. Once US 97 crosses the border into Canada, it becomes part of the historic Alaska (or Alcan) Highway. The Alaska Highway, built in 1942, was built as a wartime measure designed to provide a land route for war material and equipment to Alaska from Canada and the United States. Completed in just over eight grueling months, the Alaska Highway was punched through 1,500 miles of mountains, muskeg, and mosquitoes. Built as an emergency wartime road, the Alaska Highway has developed into a vital link between the contiguous forty-eight states, Canada, and Alaska.

The California State Highway System consists of routes described in the California Codes-Streets and Highway (Chapter 2, Article 3). US 97 in the District 2 area is described as:

• "From Route 5 in Weed to the Oregon State line near Dorris."

The following table shows the length in miles of US 97:

Table 1: Length of State Route US 97			
Area	Miles		
Siskiyou County	54.1		
District 2 Total	54.1		
California Total	54.1		
Contiguous United States Total	663		
British Columbia Total (BC Highway 97)	600		
Yukon Territory Total (Yukon Highway 1)	580		
Alaska Total (Alaska Route 2)	210		
<b>Entire Route Total</b>	2,053		
Sources: California Department of Transportation and Transportation System I	nformation Program		

# **Regional Setting**

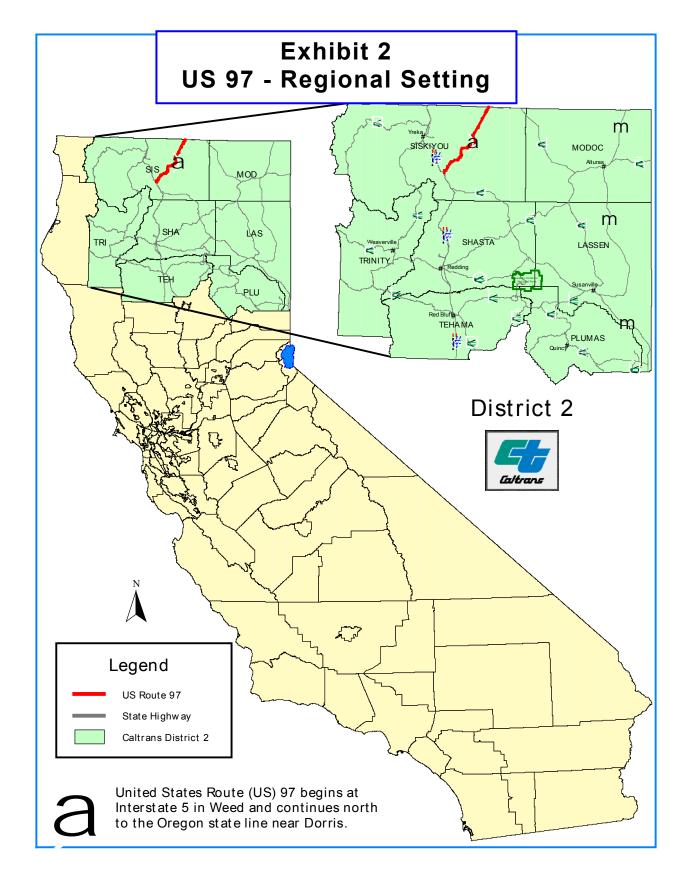
The California portion of US 97 is entirely in Siskiyou County. Siskiyou County is the fifth-largest County in California in terms of size (6,318 square miles), and encompasses a wide variety of landscapes. Among the landscapes are the canyons and peaks to the west, the lava plateaus and mountain ranges to the east, and Mount Shasta, the southernmost volcano in the Cascade Range.

More than 60% of Siskiyou County's land is managed by Federal and State Government agencies. These include the United States Forest Service, Bureau of Land Management, the United States Fish and Wildlife Service, and the California Department of Fish and Game.

US 97 runs north-south and is a major highway in Siskiyou County. Three other major north-south highways transverse the County; I-5, SR 89, and SR 139. In addition, SR 3, SR 96, SR 161, SR 263, and SR 265 serve as roads to specific destinations. State highways account for 10% of maintained road mileage in the County, but account for 64% of Daily Vehicle Miles of Travel (DVMT).

# **Route Purpose**

US 97 serves both interregional and interstate travel. Route 97 is a major north-south transportation corridor that connects with I-5 at Weed, then proceeds north through Oregon, Washington, the Canadian Province of British Columbia, and terminates in Alaska. In both Weed and Dorris, the highway serves as a main business street and is used heavily by local commuters. US 97 also provides access to the mountain recreation areas of eastern Siskiyou County, including Mt Shasta, Lake Shastina, Butte Valley Wildlife Area, Meiss Lake, Lava Beds National Monument, and the Lower Klamath National Wildlife Refuge.



US 97 is used heavily by truck traffic with volumes as high as 40% of the Annual Average Daily Traffic (AADT) in some locations. In case of an I-5 closure between Weed and Ashland, Oregon traffic will use US 97 as an emergency detour route.

# Facility Concept, Design Concept, and Level of Service

# **Facility Concept**

Facility Concept is a general term used to describe the number of lanes and degree of access control on a State Route or Freeway. Existing facility is used to describe the current, built facility. Facility Concept and Post 20-year Concept are terms used to describe the facility that will be required in the future to maintain the concept level of service under projected traffic volumes.

Based on the continued slow traffic growth rate (1.0-1.5% per year), the Facility Concept for US 97 will continue to be a two-lane conventional highway/expressway with intermittent passing lanes. Improvements will fall into two categories: improvements to maintain concept LOS, and other potential improvements. In meeting the Facility Concept, it is Caltrans' goal to provide standard lane and shoulder widths, clear recovery zones, and alignment that will allow the proposed design speed to be achieved.

Table 2: Facility Concept for US Route 97				
Planning Horizon and Setting	Concept			
Existing	Two-lane conventional highway/expressway with intermittent passing lanes.			
20-Year				
Rural Undeveloped	Two-lane conventional highway/expressway with intermittent passing lanes.			
Rural Developed	Conventional highway with two or more lanes as necessary to accommodate local and business traffic. Parking, sidewalks and other features will be designed to enhance community setting.			
Post 20-Year				
Rural Undeveloped	Two-lane conventional highway/expressway with intermittent passing lanes.			
Rural Developed  Conventional highway with two or more lanes as necessary to accommodate local and business traffic. Parking, sidewalks and other features will be designed to enhance community setting.  Source: California Department of Transportation, District 2				

# **Design Concept**

The highway design standards used for any project should equal or exceed the minimum given in the Highway Design Manual to the maximum extent feasible, taking into account cost, traffic volumes, traffic and safety benefits, right of way, socio-economic, and environmental impacts. Because design standards have evolved over many years, many existing highways do not conform fully to current standards.

When warranted, upgrading the existing roadway features such as guardrail, lighting, superevlevation, and roadbed width, should be considered either as independent projects, or as part of larger projects. Typical geometric cross section standards for US 97 are: 12-foot (3.6 meter) travel way width, 12-foot (3.6 meter) median, 4-foot (1.2 meter) treated shoulder width, 20-foot (6.0 meter) clear recovery zone, and 15-foot (4.6 meter) vertical clearance.

### **Level of Service**

LOS is a rating that uses qualitative measures to describe the operational conditions within a traffic stream. The rating scale ranges from A through F. "A" describes light traffic conditions with average travel speeds at the posted limit, and "F" describes the point at which a facility reaches its capacity and operational breakdown occurs. *Concept LOS* is used to describe the target operational condition for a facility during the twenty-year planning horizon of the TCR. Planning studies for projects to improve highway capacity should begin when a highway segment is projected to reach the concept LOS. Background information on highway capacity analysis and Level of Service is provided in *Appendix C*.

Concept LOS: C/D\*

# **Route Designations**

The Functional Classification of US 97 is rural principal arterial. Other designations that may affect planning and/or operations on US 97 are presented in Tables 3 and 4. Route designations are defined in *Appendix D*; scenic designations are defined in *Appendix E*.

Table 3: US Route 97 Designations			
Designation	Siskiyou County		
NHS <sup>1</sup>	Yes		
National Truck Network <sup>1</sup>	No		
Terminal Access <sup>1</sup>	Yes		
Strategic Highway Network <sup>1</sup>	No		
IRRS <sup>2</sup>	Yes		
High Emphasis Route <sup>2</sup>	Yes		
ITSP Focus <sup>2</sup>	No		
Freeway/Expressway <sup>2</sup>	Yes (Portions)		
ICES <sup>2</sup>	No		
Lifeline <sup>2</sup>	No		
Note: <sup>1</sup> Federal Designation; <sup>2</sup> State Designation			
Sources: California Department of Transportation, Transportation System Information Program			

<sup>\*</sup>Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities.

Table 4: US Route 97 Scenic Designations				
Designation	Siskiyou County			
All American Road (Shasta Volcanic Byway) <sup>1</sup>	Yes			
National Scenic Byway <sup>1</sup>	Yes			
U.S. Forest Service Byway <sup>1</sup>	Yes			
Historic Highway <sup>1</sup>	No			
State Scenic Highway <sup>2</sup> No (eligible)				
Note: <sup>1</sup> Federal Designation; <sup>2</sup> State Designation				
Sources: California Department of Transportation, Bureau of Land Management and United States Forest Service				

# Population, Employment and Housing

An understanding of population, employment, and housing trends is important when developing traffic forecasts. Increased demand for travel (growing traffic volumes) can generally be expected when there is a positive growth trend in all three categories. When trends are not consistent between categories or between various regions in the State, the effect on travel patterns is more difficult to assess. The following tables provide information on population, employment, and housing in Siskiyou County.

# **Population Trends**

The California Department of Finance (DOF) listed the State of California population as 29,976,000 in 1990 and 35,521,000 in 2000. This represents an increase of 8.5% over the ten-year period (1990-2000). The DOF anticipates the population of the State of California to be 41,373,000 in 2020. This is an increase of 27.2% in the twenty-year period (2000-2020). Siskiyou County's population is projected to increase 21.6% over the same period. This increase in population will be a result of recreational opportunities, retirees seeking an affordable place to live, and continued economic growth in the County.

Table 5: County Populations					
County	1990	2000	Percent Change 1990-2000	2020 Projected	Percent Change 2000-2020
Siskiyou	43,531	44,301	1.8	53,900	21.6
Source: California Department of Finance, Demographic Research Unit					

There are two incorporated communities along US 97 (Weed, Dorris) and one unincorporated community (Macdoel).

Table 6: United States Route 97 Community Populations				
County	Community on Route	1990 Population	2000 Population	Percent Change 1990/2000
Siskiyou	Weed	3,062	2,978	-2.7%
Siskiyou	Macdoel	Not available*	140	Not available*
Siskiyou	Dorris	892	886	-0.6%
*US Census did not consider Macdoel a Census Designated Place (CDP) for 1990, therefore population data is not available.  Sources: California Department of Finance, Demographic Research Unit and County Planning Departments.				

# **Employment Trends**

The U.S. Department of Commerce estimates that the number of jobs in California will grow from 27,168,400 in 1998 to 33,580,600 in 2008. This represents an increase of 23.6% during the ten-year period (1998-2008).

The Center for Economic Development's *Siskiyou County 2001 Economic and Demographic Profile* project Siskiyou County's total employment to be 25,000 in 2010. The largest growth (1998-2010) is projected to be in the services industry (30%), retail trade (20%) and Government (11%). Conversely, for the same period (1998-2010) the manufacturing industry (-30%) and the agriculture and mining industry (-18%) are projected to decline.

For the year 2000, California's civilian labor force was 17,090,800 and the unemployment rate was 4.9%. The largest employment sectors in California are services, retail trade, State/local Government, and manufacturing.

The California Employment Development Department (EDD) listed Siskiyou County's civilian labor force as 17,760 for the year 2000. Of that labor force, 16,080 were employed, resulting in an unemployment rate of 9.5%. Government was the largest employment sector (26%), followed by services (23%), and retail trade (20%).

Table 7: County Job Growth					
County 1998 2005 Projected 2010 Projected					
Siskiyou 23,526 24,000 25,000					
Sources: U.S. Department of Commerce and California Employment Development Department					

# **Housing Trends**

The DOF lists total housing units in the State in 1990 as 11,182,882, and in 2000 as 12,309,567. This is an increase of 10.0% for the ten-year period. The DOF lists total housing units for Siskiyou County in 1990 as 20,141, and in 2000 as 22,119. This represents an increase of 9.8% in total housing units for the ten-year period.

The unincorporated portion of Siskiyou County contains approximately 56% of total housing units, while the incorporated cities of Siskiyou County contain approximately 44% of total housing units. The largest City in the County is Yreka, with 15% of the total housing units.

In Siskiyou County, approximately 15% of total housing units are vacant. The average "persons per household" for Siskiyou County in 2000 is 2.2, while the statewide average is 3.0. The lower rate for Siskiyou County is, in part, a reflection of the relatively large number of retirees.

Table 8: Total Housing Units				
County 1990 1995 2000				
Siskiyou 20,141 21,395 22,119				
	Source: California Department of F	inance, Demographic Research Unit		

# **Land Use**

A wide variety of land use activities are found along California highways. These activities range from undeveloped open space to highly developed urban areas. The nature of land use in a highway corridor has significant influence on the level and type of traffic on the highway. Undeveloped forestland may generate relatively few trips but significant truck traffic. The number and type of trips generated by residential, commercial, and industrial land uses vary considerably. Changes in land use can substantially alter travel patterns over time.

Land uses along US 97 include forestland, agriculture, recreation, residential, and retail/commercial. US 97 primarily traverses national forests (Shasta and Klamath) between Weed and Macdoel. Once past Macdoel, agriculture dominates the scenery along the US 97 corridor. Agricultural production includes potatoes, grains, sugarbeets, onions, alfalfa, and strawberries, as well as livestock. Retail/commercial uses along US 97 are located in the communities of Weed, Macdoel, and Dorris.

One method to help ensure compatibility between local land use decisions and the statewide transportation system is Caltrans Intergovernmental Review (IGR) process. Potential development projects are reviewed to determine what impacts they may have on the State's transportation facilities. Impacts can include level of service changes, right of way protection issues, ramp and intersection operations, and maintenance issues. The IGR process has identified no new significant traffic generators or potential changes in land use along US 97 outside of Weed that might impact the transportation system in the future. Because of uncertainties associated with future economic and political climates, this situation may be subject to change.

# **Economic Setting**

In District 2, US 97 primarily traverses undeveloped rural areas. Historically, the economies of these areas depended on resource production. During the 1990s the timber industry underwent dramatic changes as a result of more strict environmental regulations. Consequently, recreation and tourism have become increasingly important to the communities along US 97.

The following is a brief summary of the key economic activities currently occurring in the vicinity of US 97:

### **Natural Resource Production**

Natural resource production is a valuable measure and good indicator of an area's economy. Agricultural production varies from year to year depending on the number of crops planted, acreage planted, weather conditions, and agricultural prices. Any change in natural resource production affects a number of sectors including finance, retail trade, manufacturing, services, and transportation.

Despite declines, timber, mining, and agricultural production continue to be significant contributors to the economy of Siskiyou County and small communities along US 97. Resource production and processing activities typically generate heavy truck traffic, which can significantly impact highway operating conditions in mountainous areas. The impacts include traffic slowdowns due to trucks entering and exiting the highway, reduced truck speeds on uphill grades, and more rapid deterioration of the highway surface due to heavy loads.

### Retail/Commercial

Most retail and commercial activities along US 97 are located in the communities of Weed, Macdoel, and Dorris. While some businesses cater to only the local residents, or tourists, most serve both. During peak recreational periods, the combination of local and non-local traffic utilizing commercial areas can create sporadic localized congestion.

### Government

Federal, State, and local Government are significant employers in Siskiyou County. However, their affect on traffic levels is minimal given the limited number and size of Government facilities located directly along US 97.

### Recreation/Tourism

The travel industry is a major component of California's economy and in the three communities along US 97. The travel and tourism industry provides 5.8% of the State's \$1.3 trillion economy. During 2000, travelers in California contributed an estimated \$75.4 billion to the State's economy and generated \$4.9 billion in State and local tax receipts. Travel and tourism is a high-growth industry that is projected to double in size over the next decade.

Some of the attractions and popular activities on or near the vicinity of US 97 that receive tourist traffic include:

- Lower Klamath National Wildlife Area inhabited by approximately 50 species of mammals.
- Lava Beds National Monument.
- Bird watching (over 200 species): including the largest concentration of wintering Bald Eagles in the lower 48 states.
- Excellent hunting for antelope, deer, bear, wild boar, quail, pigeons, ducks, and geese.

- Streams and lakes offer great fishing for Rainbow Trout, Catfish, Brown Trout, and Bass.
- Nature trails and campgrounds.
- Winter recreation snowmobiling, cross-country skiing, snowshoeing, and dogsledding.
- Flagpole (200 feet) in Dorris tallest west of the Mississippi.
- Vietnam War Memorial Living Memorial Sculpture Garden.

# **Goods Movement**

Goods movement, transportation of freight rather than people, can have significant impacts on a state's economy. California's goods movement transportation system is a multimodal network for highways, rail lines, seaports, airports, pipelines, intermodal terminals, and international border crossings. Goods movement along or near US 97 is accomplished predominately with highways, and to a lesser degree, rail and airports.

# **Highways (Trucks)**

US 97 is a major route for trucks transporting agriculture and timber products. It is a popular alternative to I-5 due to fewer grades, which allow trucks to consume less fuel and achieve a faster travel time to many destinations in Oregon. In addition, during winter closures of I-5 (primarily at Siskiyou Pass), US 97 is used as an alternate route, which creates congestion within the City of Weed.

When I-5 is closed due to weather, trucks continue to come into Weed from southbound US 97, which is usually still open. As a result, trucks line up on US 97 within the City because they cannot access I-5. This leads to trucks parking three-wide on the roadway, interference with snow removal and local traffic, and problems clearing the congestion once I-5 does open.

While US 97 is attractive to truck drivers, it does have some lower speed locations as well. Within Dorris, US 97 has three 90° turns, which slow truck speeds to 20 mph or less. In the communities of Dorris and Weed, the highway also serves as a main street and is used heavily by local traffic, which can slow goods movement. Despite the slowdowns, in 1998 trucks comprised up to 40% of the total traffic on US 97 between I-5 and the Oregon border. As Tables 9 and 10 indicate there are no length, weight, or height restrictions on US 97.

With continued increases in truck volumes, the existing US 97 roadway will be subject to increased delay and pavement deterioration, which will further reduce overall capacity and level of service.

Table 9: Truck Length Restrictions on US Route 97						
County	County Begin/End Segment Type of Restriction Improvement to Remove Restriction:					
Siskiyou 0.0/54.1 54.1 None None						
	Source: California Department of Transportation, Office of Traffic Operations					

Table 10: Truck Weight/Height Restrictions on US Route 97					
County	Begin/End PM	Structure Name	Type of Restriction	Improvement to Remove Restriction:	
Siskiyou 0.0/54.1 None None None					
Source: California Department of Transportation, Office of Transportation Permits					

### Rail

Rail is utilized for items of extreme weight and large size or volume that need to be transported over long distances.

### Major Railroads:

The Union Pacific (UP) Railroad passes under US 97 at PM 0.15 in Weed, and proceeds parallel to the highway on the east. The UP line crosses US 97 north of Dorris at PM 51.07 and again parallels the highway into Oregon (see Exhibit 3 – Related Facilities).

Amtrak also uses this Route, but there are no passenger stops along US 97. The nearest passenger stop to the north is in Klamath Falls, Oregon and the nearest to the south is in Dunsmuir.

### Shortline Railroads:

Shortline railroads provide an important link in the statewide Goods Movement Transportation System, acting as connectors to the major railroads, harbor areas, and intermodal terminals. However, along US 97 there are no shortline railroads. The four nearest shortline railroads are the Yreka Western Railroad Company (YW), Central Oregon & Pacific Railroad Incorporation (CORP), Long Bell Lumber Company Railroad, and McCloud Railway Company (MCR).

# **Airports**

Siskiyou County has seven public-use airports:

- Butte Valley Airport
- Dunsmuir Municipal Mott Airport
- Happy Camp Airport
- Montague Yreka Rohrer Field
- Scott Valley Airport
- Siskiyou County Airport
- Weed Airport

The only airport adjacent to US 97 is the Butte Valley Airport. The Butte Valley Airport is County operated, and classified as general aviation. It is located between the City of Dorris and the community of Macdoel on the west side of US 97. Six tie-down spaces are available on the apron; however, there are no services or hangar spaces.

With projected modest growth and limited funding for improvements, it is anticipated that no significant changes will be undertaken at the Butte Valley Airport. The Siskiyou County Regional Transportation Plan does, however, list the need for improved aviation connectivity and access.

# Right of Way

Right of way is real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.). The existing right of way for US 97 is summarized in Table 11.

Table 11: Existing Right of Way on US Route 97				
County	Begin/End PM	Approximate Right of Way Width	Type of Right of Way	
SIS	L0.00 / 2.10	100' - 200'	State Title	
SIS	2.10 / 4.30	100' - 150'	State Title	
SIS	4.30 / 4.60	250'	State Title (ST)	
SIS	4.60 / 5.00	450'	ST With Access Control	
SIS	5.00 / 9.75	150' - 240'	ST With Access Control	
SIS	9.75 / 16.55	320' - 500'	ST With Access Control	
SIS	16.55 / 34.10	130' - 200'	State Title	
SIS	34.10 / 34.60	200'	ST With Access Control	
SIS	34.60 / 40.00	130' - 250'	State Title	
SIS	40.00 / 49.20	130' - 290'	State Title	
SIS	49.20 / 50.20	Special*	Prescriptive	
SIS	50.20 / 51.30	60' - 80'	State Title	
SIS	51.30 / 54.08	170' - 240'	ST With Access Control	
*Right of Way base	ed on historical use - no existing width available. Source: California De	partment of Transportation, Office of Right of Wa	ıy	

As observed from the table, US Route 97 has a mixture of right of way types:

- State Title. State title is property purchased by the State and held in fee title.
- Prescriptive. Prescriptive is a type of easement that comes into existence without formal action because of long-term historical use in a corridor. Right of way widths are defined by the area of use.
- Access control. Access control is the condition where the right of owners or occupants of abutting land as well as other entities and individuals to access a highway is fully or partially controlled by public authority.

# **Access Management**

The type and extent of access allowed onto a highway has a direct affect on facility safety and operation. More access points or less control of access locations, typically reduce travel speeds and introduce vehicle conflicts on the facility. Access management involves controlling or managing where vehicles are allowed to enter the highway in order to improve highway operations and reduce accidents. Caltrans purchases access control on important interregional routes to ensure transportation efficiency and safety.

Locations on US 97 where current access conditions may affect operations include the two primary communities along the route: Weed and Dorris. In both communities, the building fronts face directly onto the highway, and parking areas are undefined, while multiple driveways and cross streets enter onto the highway. During the summer travel season, when tourism and truck volumes are highest, traffic can be slowed or stopped on US 97, which also leads to delays for crossing traffic at peak periods. The cities and County play a key role in access control via their land development policies.

Caltrans will work to manage access through the following:

- Converting prescriptive rights to fee title.
- Processing encroachment permits.
- Designing highway improvements.
- Monitoring local land development proposals through the IGR process.

# Adoptions, Rescissions and Relinquishments

Adoption involves action by the California Transportation Commission to approve the location and general alignment of a new route or route segment. Rescission involves removing/deleting a previously adopted route alignment. Relinquishment involves the transfer of all or a portion of a State highway to a City, County or other public entity. There are no planned adoptions, rescissions, or relinquishments on US 97.

# **Environmental Status**

Caltrans strives to maintain, operate, and improve the highway in a manner sensitive to the environmental setting. Environmental issues are addressed in the System Planning process, and the project planning and development process as early as feasible. Known environmental issues and concerns are included in a TCR so that planners, engineers, and other project development staff can incorporate environmental factors into project design from the outset.

Some of the key environmental issues along US 97 are:

- Biological (sensitive habitats, State and federally-listed species).
- Cultural Resources (historical and archaeological).
- Water Quality (riparian, wetland and floodplains).
- Wildlife/Vehicle incidents (particularly deer).
- Scenic designations.

Detailed environmental information on issues specific to each segment is provided in the Segment Fact Sheets. Air quality designations are provided in *Appendix F*.

# **Safety**

The safety information provided in this TCR was taken from Table B of the Traffic Accident and Surveillance and Analysis System (TASAS). It should be used for general planning purposes and as an indicator of how the accident rate of a particular highway compares to the accident rate averages on similar routes statewide. Higher than average rates are not lone indicators that corrective action by Caltrans is warranted. Accident rates can be greatly influenced by environmental factors as well as the time period being measured. The following is a five-year summary of the traffic collision rates for US 97. For specific accident rates by segment refer to the Segment Fact Sheets.

Table 12: Traffic Collision Rate (per million vehicle miles) for Route 97					
_	US 97 Actual Accident Statewide Average				
Ra	ate	Accident Rate			
Fatality	Fatal +	Fatality	Fatal +		
	Injury		Injury		
0.012	0.25	0.035	0.56		
Source: TA	SAS Database (DATE	E 1-1-1997 TO 12-30-2	2001 DATE)		

# **Maintenance and Operations**

The State Highway System represents an enormous taxpayer investment, so preservation of the existing system is a top priority for Caltrans. Specific maintenance and operational concerns identified during preparation of the US 97 TCR are addressed in the Segment Fact Sheets, but can be summarized as follows:

- Floodplains
- Erosion Control
- Limited opportunities for travelers to pull off the highway to rest
- Pavement surface condition (accelerated deterioration due to harsh winter conditions)
- Long response times to highway incidents
- Limited passing lanes
- Animal/vehicle collisions
- Geometrics in Weed and Dorris

# **Transportation Options**

# **Transit-Regional**

Provision of transit in rural areas is challenging for a number of reasons including: long distances, limited/dispersed population base, scheduling difficulty, and limited funding. Regional transit services available on or near US 97 are as follows:

### Siskiyou County:

Siskiyou Transit and General Express (STAGE) provides Siskiyou County's local and regional transit service. The existing service consists of a fixed route system designed primarily for intercity travel. Stage has the following routes:

- Interstate 5 (northbound & southbound)
- Yreka (northbound & southbound)
- Klamath River/Happy Camp (SR 96)
- Yreka/Hornbrook (SR 3)
- Yreka/Montague/Scott Valley (SR 3)

The only community along US 97 served by STAGE is Weed. The Northbound/Southbound I-5 Route has five stops in Weed throughout the day between 7:30 a.m. and 6:30 p.m.

# **Transit-Interregional**

Greyhound Bus operates directly along the US 97 corridor. Greyhound has a bus station located in Weed with hours of operation Monday through Friday from 8:00 a.m. to 4:00 p.m., and on Saturday from 8:00 a.m. to 12:30 p.m. There are limited "service bus stops" (a stop along a highway route, without an enclosed waiting area) along US 97 in both Macdoel and Dorris.

# **Rail Passenger Service**

Amtrak provides interstate passenger service parallel to the US 97 corridor as part of their Coast Starlight Route (Los Angeles to Seattle). The two nearest train stations to US 97 are located in Dunsmuir, CA, and Klamath Falls, OR. Southbound along the 97 corridor from Klamath Falls, the Coast Starlight departs at 9:45 p.m. and arrives in Dunsmuir at 12:20 a.m. Northbound departure from Dunsmuir is at 5:04 a.m. with arrival in Klamath Falls at 8:25 a.m.

The next nearest rail passenger service in Siskiyou County is in McCloud. McCloud Rail provides service on the Shasta Sunset Dinner Train from January to October, and occasionally provides rail passenger service from McCloud to Burney. Exhibit 3 displays the rail service near US 97 (page 26).

# Airports

Air transportation options in the vicinity of US 97 are limited (see Exhibit 3 on page 26). There are no commercial airports directly adjacent to US 97; however, there is one located to the north in Oregon (Klamath Falls International Airport), and one to the south in Redding (Redding Municipal Airport).

US 97 TCR October 2003

There is one publicly owned airport adjacent to US 97; Butte Valley Airport with zero based aircraft, 2000 annual operations (take-off and landing), and an average of six daily operations. There are also six other publicly owned airports in Siskiyou County: Dunsmuir Municipal (Mott Airport), Happy Camp Airport, Montague (Yreka Rohrer Field), Scott Valley Airport, Siskiyou County Airport, and Weed Airport.

# **Bicycle Travel**

Bicycle travel is permitted along the US 97 corridor. Total shoulder widths on the Route range from 0 to 15 feet, with treated shoulder widths ranging from 0 to 10 feet. For most of the US 97 corridor, treated shoulders are between four and eight feet. Caltrans has a goal, however, to attain a four-foot or greater treated shoulder along the entire Route in order to provide bicyclists with a more comfortable ride.

Caltrans-District 2 has created the "Cycle Guide for State Highways of Northern California" for bicycle riders to reference riding locations. Additional information on bicycle travel may be obtained from Siskiyou County, and the communities along US 97.

### **Alternate Facilities**

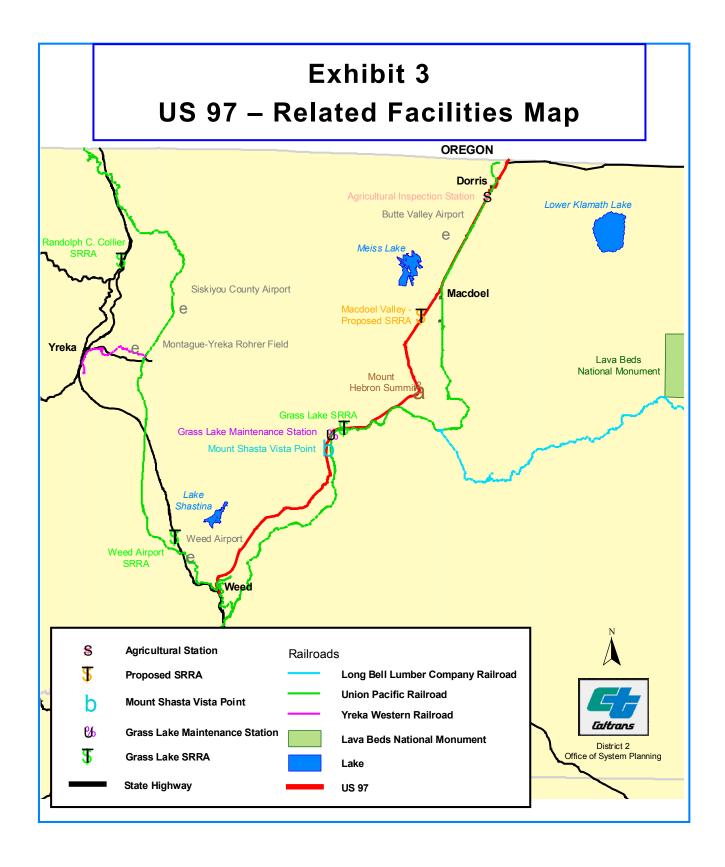
There are several State highways and arterial streets paralleling or intersecting US 97 that can serve as an alternative for travelers. In most instances, however, US 97 will be the preferred route due to faster travel time and flatter grades.

### State Highways

- I-5
- SR 265
- SR 161

### Local Roads

Appendix G includes a list of local roads that roughly parallel US 97.



# **Related Facilities**

The categories that follow represent important facilities on or near the Route that help regulate traffic flow, provide amenities for travelers, or are utilized in the maintenance and operation of the highway.

# **Bridges**

Bridges are structures of more than 20 feet in length that span a body of water. There are five Bridges on the Route. Bridge information is provided in the Fact Sheets.

# **Safety Roadside Rest Areas**

Safety Roadside Rest Areas (SRRA) are roadside areas provided for motorists to stop and rest for short periods. State facilities usually include paved parking areas, drinking water, toilets, tables, benches, telephones, and information panels. Other agencies may also operate roadside rest areas with different ranges of amenities.

### **Existing SRRA:**

County	SR	PM	Name	Operator
SIS	97	0.235	CDF Fire Station	City of Weed
SIS	97	21.815	Grass Lake	Caltrans

### \*Proposed SRRA:

County	SR	PM	Name	Operator
SIS	97	37.3	Macdoel Valley	Caltrans

<sup>\*</sup> The Office of State Landscape Architecture developed a master plan for new rest areas in 2000. Based on recommendations from the Districts, the master plan includes 80 general locations where new rest areas are needed. The 2000 master plan does not specify a time frame for implementation or a funding plan. The California Transportation Commission has asked Caltrans to continue to seek joint economic development partnership for new rest areas.

### **Traffic Control**

The following table identifies all locations on US 97 that are either stop-controlled or signal controlled.

County	PM	Location	Type
SIS	0.43	South Junction 265/97	Stop-control on US 97*

<sup>\*</sup> Intersection will be reconfigured with stop-control on SR 265 as part of the Downtown Weed Rehabilitation project

# **Agricultural Inspection Station**

County	PM	Location	Type
SIS	49.82	Dorris – south city limit	USDA Facility*

<sup>\*</sup>Facility has stop-control on southbound US 97.

# **Snow Chain Sign Locations**

Snow Chain Signs are traffic signs mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic in regard to snow conditions.

County	PM	Sign Location
SIS	2.6	Chain Sign #0 southbound at Brookside Avenue
SIS	14.6	Chain Sign #1 northbound at Military Pass Road
SIS	19.2	Chain Sign #2 northbound at Mt. Shasta Vista Point
SIS	23.8	Chain Sign #3 northbound 1.3-miles north of Grass Lake Rest Area
SIS	27.7	Chain Sign #4 northbound at Tennant Bray Road
SIS	34.6	Chain Sign #5 southbound at Ball Mountain Road
SIS	51.06	Chain Sign #6 northbound near Dorris Railroad Crossing
SIS	52.9	Chain Sign #7 southbound 1-mile south of Junction SR 161

# **Railroad at Grade Crossings**

Railroad at-grade crossings are places where highway traffic crosses railroad tracks at the same elevation. Currently, there are two at-grade railroad crossings in the City of Dorris.

County	PM	Location	Number	Size
SIS	50.2	Mt. Valley Molding Company	2-96	20' Wide
SIS	51.07	Dorris Railroad Crossing	2-88	52' Wide

# **Grade Separations**

Grade Separations are vertical separations of intersecting facilities (road, rail, etc.) by the provision of crossing structures. With an underpass, the State highway crosses under the railroad, and with an overhead the highway passes over the railroad.

County	PM	Location	Number	Size
SIS	0.15	Weed Overhead	2-82	52' Wide

# **Passing Lanes and Turnouts**

Passing lanes are portions of the roadway provided for weaving, truck climbing, speed change, or for other purposes supplementary to through traffic movement. Turnouts are short passing lanes on highways.

County	PM	Passing Lane	Direction	Length (miles)
SIS	5.17/5.57	Passing Lane	SB	0.40
SIS	4.80/5.35	Passing Lane	NB	0.55
SIS	8.69/10.45	Passing Lane	NB	1.76
SIS	11.07/17.02	Passing Lane	NB	5.95
SIS	19.04/20.41	Passing Lane	NB	1.37
SIS	21.63/21.88	Passing Lane	SB	0.25
SIS	28.78/30.14	Passing Lane	NB	1.36
SIS	30.05/32.93	Passing Lane	SB	2.88
SIS	51.45/52.30	Passing Lane	SB	0.85
SIS	51.39/52.36	Passing Lane	NB	0.97

# **California Department of Transportation Maintenance Stations**

Maintenance Stations are facilities used by Caltrans to maintain the highway year-round. The following maintenance stations are responsible for US 97:

Station/Station Number PM Coverage on US 97		<b>Station Phone Number</b>
Grass Lake 2-18	SIS 0.00 / SIS 54.08	(530) 398-4543

# California Department of Transportation Sand Houses

Sand houses are storage facilities for abrasives and deicers. Sand houses are located in areas where temperatures are consistently low in the winter.

County	PM Location	
SIS	20.1	Grass Lake

### **Vista Points**

Vista Points are paved areas beyond the shoulder, which permits travelers to safely exit the highway to stop and see a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water, and telephones may be provided.

County	PM	Name
SIS	19.090	Mount Shasta Vista Point

### Park & Ride Lots

Park & Ride lots are locations where patrons drive private automobiles or ride bicycles to a transit station or carpool/vanpool waiting area, and park the vehicle. They then ride the transit system or take a carpool or vanpool to their destinations. Agencies other than Caltrans may operate Park & Ride lots. There are no Park & Ride lots located on US Route 97. The nearest State-owned Park & Ride lot is located near the City of Mount Shasta.

County	PM	Location	Facility	Operator	Spaces
SIS	PM	SR 89 - At Azalea Road near	Mt. Shasta	State	20
	34.3	Mt. Shasta			

# **Intelligent Transportation Systems**

Intelligent Transportation Systems (ITS) apply advanced communication, information, and electronics technology to solve existing transportation problems. ITS technologies often offer the potential to improve safety and efficiency relatively quickly and at a reasonable cost. A number of conditions on US 97 lend themselves to ITS applications:

- Mix of users (rural and urban travelers), many unfamiliar with the Route
- Steep grades, curves, limited passing opportunities
- Long distances between services
- Few convenient detour options (alternate routes)
- Adverse road surface and weather conditions

Some of the ITS technologies appropriate for US 97 include Remote Atmospheric Weather Systems (RAWS), Closed Circuit Televisions (CCTV), Changeable Message Signs (CMS), Highway Advisory Radios (HAR), and Roadway Weather Information Systems (RWIS). CCTV and RWIS are used as surveillance and traveler information devices for monitoring road and weather conditions. CMS and HAR provide information to the driver who can then make the decisions necessary to have a safe and efficient trip.

DISTRICT 2 EXISTING ITS FIELD ELEMENTS					
ELEMENT TYPE	COUNTY	ROUTE	POST MILE	LOCATION DESCRIPTION	
CCTV	SIS	97	20.19	GRASS LAKE MAINTENANCE STATION	
CCTV	SIS	97	34.45	MOUNT HEBRON WEIGH-IN-MOTION (WIM)	
RAWS	SIS	97	52.00	AT DORRIS HILL	
CCTV	SIS	97	52.00	AT DORRIS HILL	

DISTRICT 2 PR	DISTRICT 2 PROPOSED ITS FIELD ELEMENTS					
ELEMENT TYPE	COUNTY	ROUTE	POST MILE	LOCATION DESCRIPTION		
CMS	SIS	97	2.00	NORTH OF WEED		
CCTV	SIS	97	29.91	AT MT HEBRON SUMMIT		
RWIS	SIS	97	29.91	AT MT HEBRON SUMMIT		
CCTV	SIS	97	49.83	AT DORRIS INSPECTION STATION		
RWIS	SIS	97	49.83	AT DORRIS INSPECTION STATION		
HAR	SIS	97	51.00	IN DORRIS		
CMS	SIS	97	52.36	NORTH OF DORRIS		

# **Coordination with other Plans**

During preparation of the TCR, local and regional planning documents were reviewed. These documents include City and County General Plans, Regional Transportation Plans, Resource Management Plans, traffic studies, and other related documents. Specific plans reviewed for the US 97 TCR are listed in *Appendix H*.

Preparation of the TCR also involved review of relevant transportation plans from other Districts and States. These documents include TCRs of adjoining Caltrans Districts, statewide planning tools (ITMS, CTIS, CTIPS, etc.) and route/corridor studies from adjoining states. An abstract of documents utilized is provided in *Appendix H*.

# **ROUTE SEGMENTS**

For purposes of analysis, highways are divided into smaller pieces called segments. Each segment selected has one or more characteristics that distinguish it from other segments. Information that is obtained and/or developed at the segment level includes traffic growth projections, present and future level of service, target (concept) level of service, environmental issues, right of way and adjoining land uses. This information is used during assessment of the potential need for operational and capacity improvements, as well as in subsequent development of project initiation documents.

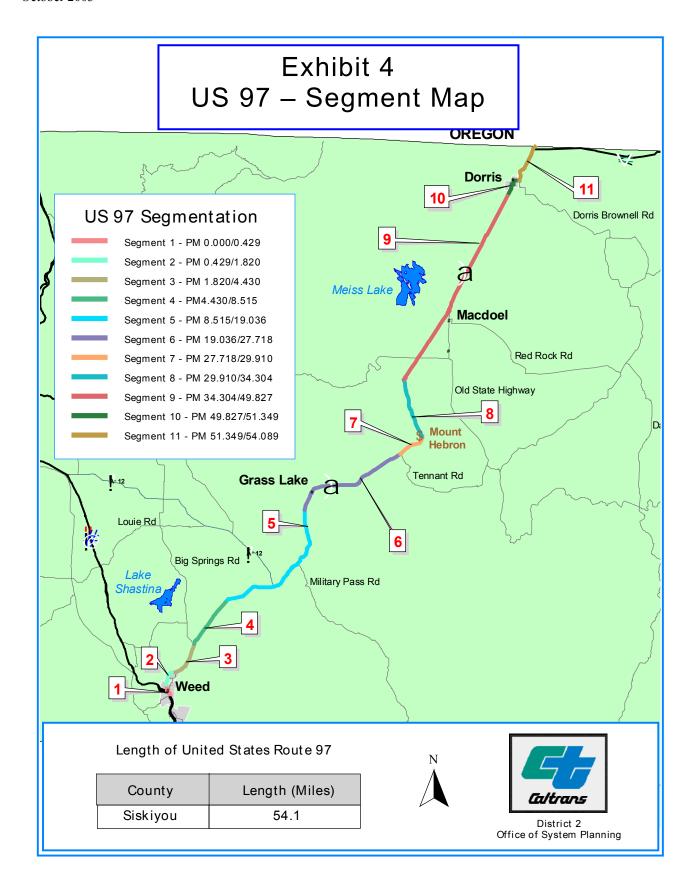
Criteria used in the selection of segments for analysis include:

- Change in route concept.
- Change in facility type.
- Change in function or use of route.
- Significant changes in ADT.
- Significant changes in terrain or grade.
- Junction/crossing of other highway or major facility.
- Urban/rural boundaries or other significant change in land use.
- District boundaries.
- County/State/National boundaries.

The pages that follow provide a detailed description of each segment. Additional information for each segment (significant land uses, environmental issues, accident data, etc.) is provided in the Segment Fact Sheets. Table 13 provides a summary of the eleven segments identified for US 97, while Exhibit 4 (Segment Map) provides a visual representation of the segments.

			Та	ble 13:	<b>US Route 97 Segments</b>	
Segment	Co	Route	Begin PM	<b>End PM</b>	From	То
1	SIS	97	0.000	0.429	Interstate 5	State Route 265
2	SIS	97	0.429	1.820	State Route 265	Angel Valley Road
3	SIS	97	1.820	4.430	Angel Valley Road	Big Springs Road
4*	SIS	97	4.430	8.515	Big Springs Road - NB	County Road (Cinder Pit) – NB
					County Road (Cinder Pit) - SB	Big Springs Road – SB
5*	SIS	97	8.515	19.036	County Road (Cinder Pit) - NB	Begin Passing Lane – NB
					Begin Passing Lane - SB	County Road (Cinder Pit) – SB
6*	SIS	97	19.036	27.718	Begin Passing Lane - NB	Tenant Bray Road – NB
					Tenant Bray Road - SB	Begin Passing Lane – SB
7*	SIS	97	27.718	29.910	Tenant Bray Road - NB	Mount Hebron Summit – NB
					Mount Hebron Summit - SB	Tenant Bray Road – SB
8*	SIS	97	29.910	34.304	Mount Hebron Summit - NB	Foot of Grade – NB
					Foot of Grade - SB	Mount Hebron Summit – SB
9	SIS	97	34.304	49.827	Foot of Grade	Agricultural Station
10	SIS	97	49.827	51.349	Agricultural Station	North Dorris City Limit
11*	SIS	97	51.349	54.089	North Dorris City Limit - NB	Oregon State Line – NB
					Oregon State Line - SB	North Dorris City Limit – SB

<sup>\*</sup>Northbound and southbound direction of travel analyzed separately due to grade and/or passing lane.



<b>SEGMENT 1</b>							
PM	KP	Description:					
SIS 0.000/02.429	SIS 0.000/0.690	I-5 to SR 265					
Facility Concept: Tv	Facility Concept: Two-lane conventional highway						

### **Segment Description/Community Issues:**

Segment 1 begins at the intersection of I-5 and US 97. As you exit I-5 northbound onto US 97, you immediately enter the City of Weed, which is nestled on the western slopes of Mount Shasta in Northern California at an elevation of 3,467 feet.

As you drive through Weed, you pass Main Street on your right where you see Weed's historic architecture, colorful murals, and many sculptures illustrating the past, present, and future of the town. The population of Weed is 3,100 with another 5,000 living just outside the City limits. Weed has two elementary schools, a high school, and College of the Siskiyous, which serves 1,404 full-time and 1,950 part-time students. As a result, the highest bike and pedestrian volumes for US 97 are found here. Segment 1 terminates at the junction of SR 265 and US 97.

<b>SEGMENT 2</b>						
PM	KP	Description:				
SIS 0.429/1.820	SIS 0.690/2.920	SR 265 to Angel Valley Road				
Facility Concept: Tv	Facility Concept: Two-lane conventional highway					

### **Segment Description/Community Issues:**

Segment 2 begins at the junction of SR 265 and US 97, just north of downtown Weed. Heading north on a subtle upgrade, you begin to see the national forests, high desert plains, and volcanic formations that surround Weed. West of US 97 there is no development, just the natural topography of the area; however, this land is zoned for various residential, commercial, and manufacturing uses. East of this segment is Central Weed. At the Lincoln Avenue intersection a residential neighborhood sits to the west, and flashing yellow beacons (one in each direction) inform drivers that pedestrians may be using the crosswalk at this intersection. Just past Lincoln Park and the Winema Cemetery, you exit Weed and Segment 2 ends at Angel Valley Road.

<b>SEGMENT 3</b>					
PM	KP	Description:			
SIS 1.820/4.430	SIS 2.920/7.129	Angel Valley Road to Big Springs Road			
Facility Concept: Two-lane conventional highway					

### **Segment Description/Community Issues:**

Segment 3 runs from Angel Valley Road to Big Springs Road. Driving northbound from Angel Valley Road, majestic Mount Shasta looms to the right, perhaps the most impressive feature of the Cascade Range. This rolling segment passes through various land uses including a strip mall, a mini-mart gas station, a mini storage complex, and small-scale agricultural areas. The highway in this segment is level and straight with wide shoulders. Segment 3 ends at Big Springs Road.

<b>SEGMENT 4</b>					
PM	KP	Description:			
SIS 4.430/8.515	SIS 7.129/13.704	Big Springs Road to County Road (Cinder Pit)			
Facility Concept: Two-lane conventional highway					

### **Segment Description/Community Issues:**

Travelers wishing to have a day at the lake can make a left (heading northbound) on Big Springs Road to visit Lake Shastina. On the shores of Lake Shastina is the community of Lake Shastina; a thriving community with its own power, sewer, water, police, and fire department. It has been ranked as one of the top 100 places to retire in America. Recreation opportunities in and around Lake Shastina include water skiing, wind surfing, boating, an 18-hole professional golf course, and a 9-hole executive course.

North of Big Springs Road, US 97 traverses through the Shasta National Forest. The terrain is rolling with only dry vegetation and an occasional tree. The vast expanses of open space on both sides of the highway create both a feeling of freedom and isolation. Highway 97 is relatively straight and wide in this area. However, looming ahead is Mount Hebron Pass (elevation 5,202 feet).

<b>SEGMENT 5</b>			
PM	KP	Description:	
SIS 8.515/19.036	SIS 13.704/30.636	County Road (Cinder Pit) to Begin Passing Lane	
Facility Concept: Two-lane conventional highway			

### **Segment Description/Community Issues:**

Segment 5 begins at the northbound truck-climbing lane (PM 8.5). Four miles north is County Road A-12, which is the old 99/97 cutoff that still links I-5 and US 97. As US 97 slowly climbs toward Grass Lake the remainder of the segment is mountainous. Initially this segment is in the Shasta National Forest, but once US 97 crosses Military Pass Road the highway enters the Klamath National Forest. Segment 5 ends just south of the Mount Shasta Vista Point.

<b>SEGMENT 6</b>		
PM	KP	Description:
SIS 19.036/27.718	SIS 30.636/44.601	Begin Passing Lane to Tenant Bray Road
Facility Concept: Two-lane conventional highway		

### **Segment Description/Community Issues:**

Segment 6 starts at the Mount Shasta Vista Point, a place for you to enjoy the fantastic view of Mount Shasta. About a mile north is the Caltrans Grass Lake Maintenance Station, which is the base of operations for all maintenance activity along US 97 in California. To the north, the highway flattens out and you will notice an abundance of agricultural land adjacent to US 97. The Grass Lake Rest Area is next at post mile 21.8. This State facility provides an opportunity to stop and rest for a short time, replenish drinking water, and perhaps enjoy a picnic lunch. The facility is equipped with rest rooms, tables and benches, telephones, and information kiosks. The topography begins to change near Tenant Bray Road as you approach Mount Hebron grade.

<b>SEGMENT 7</b>	SEGMENT 7					
PM	PM KP Description:					
SIS 27.718/29.910						
Facility Concept: Two-lane conventional highway						

## **Segment Description/Community Issues:**

Segment 7 starts at Tenant Bray Road and climbs to Mount Hebron Summit. As you drive through the Klamath National Forest, this section of US 97 provides a very scenic view. While this segment has wide shoulders and a truck-climbing lane, travelers should be aware of deer and other wildlife crossing the highway. Segment 7 ends at the Mount Hebron Summit with an elevation of 5,202 feet.

SEGMENT 8						
PM	PM KP Description:					
SIS 29.910/34.304 SIS 48.135/55.207 Mount Hebron Summit to Foot of Grade						
Facility Concept: Two-lane conventional highway						

## **Segment Description/Community Issues:**

As you travel northbound, US 97 begins a gradual downgrade through the Klamath National Forest. Tall Ponderosa Pine trees border this scenic two-lane segment and provide you with a feeling of seclusion. Wildlife, especially deer, is also prominent in the area. As you near the foot of the grade, the forest begins to fade, and the long high desert plateau of the Butte Valley begins, signaling the end to Segment 8.

SEGMENT 9					
PM	KP	Description:			
SIS 34.304/49.827 SIS 55.207/80.189 Foot of Grade to Agricultural Inspection Station					
Facility Concept: Two-lane conventional highway					

## **Segment Description/Community Issues:**

Once past the base of Mount Hebron, you enter the high desert plateau of the Butte Valley. Mountain ridges and lakes are nestled between the slopes of Mount Shasta, and the Great Klamath Basin surrounds the valley and highway. This alluvial plain was formed when debris washed into the valley from the surrounding volcanic mountains. Today, this valley is perfect for the farming and cattle ranches located adjacent to US 97. As you drive this segment you will notice fields of strawberries, hay, potato crops, and numerous cattle grazing areas.

Midway through Segment 9 is the town of Macdoel (population 140), which was founded in 1906. Located east of US 97, and fifteen miles south of Oregon, Macdoel offers two service stations, mini-marts, a restaurant, and a truck scale.

Northwest of Macdoel along US 97 is the Butte Valley Wildlife Area and Meiss Lake. Here you can take a detour on Meiss Lake Road to view many different habitats, such as forests, grasslands, wetlands, lakes, and croplands. A wide diversity of plant and animal life exists in the Butte Valley, including over 200 bird species and 50 mammal species.

Also located in this segment, adjacent to US 97, is the Klamath National Forest. The Forest provides excellent hunting opportunities for big game; antelope, deer, bear, and wild boar. Small game hunting includes quails, pigeons, ducks, and geese. The many streams and lakes in the area provide for excellent fishing.

SEGMENT 10					
PM	KP	Description:			
SIS 49.827/51.349 SIS 80.189/82.638 Agricultural Inspection Station to North Dorris City Limit					
Facility Concept: Two-lane conventional highway					

## **Segment Description/Community Issues:**

From the Agricultural Inspection Station, just south of Dorris, US 97 is paralleled by the UP railroad and surrounded by farms. Once US 97 curves its way into the City of Dorris (population 800), it serves as Main Street. Drivers can enjoy the tranquility of this small town known for its flagpole (the tallest, west of the Mississippi). Travelers pass small motels, single-family homes, two-pump gas stations, City Hall, an old-time saloon, various local restaurants, and a grocery store. Dorris is the place to be for travelers who want to enjoy the pleasures of a small town. Currently, there are three 90° turns through Dorris which impede truck operations. Segment 10 ends at the at-grade railroad crossing.

SEGMENT 11						
PM	PM KP Description:					
SIS 51.349/54.089 SIS 82.638/87.048 North Dorris City Limit to Oregon State Line						
Facility Concept: Two-lane conventional highway						

## **Segment Description/Community Issues:**

North of Dorris the highway bends left and you begin to climb Dorris Hill. For those driving southbound, Dorris Hill provides a panoramic view of the Butte Valley. For those driving northbound, various agricultural farms line the side of the highway. Continuing north, you will see State Route 161 on the right, just before the California/Oregon border. SR 161 provides you an opportunity to view wetlands, and the migratory birds nesting in the Lower Klamath National Wildlife Refuge. This segment of US 97 is fully access controlled with few local roads, limiting any possible future development. Segment 11 ends at the California/Oregon border.

# **SEGMENT FACT SHEETS**

## **Format of Fact Sheets**

The Segment Fact Sheets that follow provide detailed information for each segment on US 97. Definitions for vocabulary on the Segment Fact Sheets are found in Appendix A: Glossary.

- Page 1. Segment location, segment/facility concept, design concept, existing and future LOS, highway information, existing geometrics, system designations, significant land uses, and segment description.
- Page 2. Methodology for traffic projections, traffic data, segment issues, proposed improvements, environmental issues, air quality, and accident data.
- **Page 3.** General maintenance issues, structures, pavement issues, drainage/hydraulics issues, agreements with local agencies, truck/permit issues, congestion/facility closure, access issues, snow/ice issues, safety/operational issues, Intelligent Transportation Systems and bibliography/special studies.

## **Implementation of Improvements**

A number of projects are proposed on US 97 over the next twenty years. The proposed projects were identified based on capacity and operational analysis, as well as an extensive public outreach program that included meetings with local and regional agencies and the general public. Implementation of many of the identified improvements will require funding and delivery partnerships between Caltrans and its local and regional partners.

## **Level of Service (LOS) Summary**

Table 14 summarizes existing and future LOS conditions for all eleven segments of US 97. Existing conditions reflect 2002 data. The LOS for years 2012 and 2022 does not reflect completion of any proposed projects on US 97.

	Table 14: US Route 97 Level of Service (LOS) Summary								
Seg	Со	Rte		End PM	Road From	Road to	LOS 2002	LOS 2012	LOS 2022
01	SIS	97	0.000	0.429	Interstate 5	State Route 265	D	Е	Е
02	SIS	97	0.429	1.820	State Route 265	Valley Road	С	D	D
03	SIS	97	1.820	4.430	Valley Road	Big Springs Road	С	C	С
04	SIS	97	4.430	8.515	Big Springs Road - NB	County Road (Cinder Pit) – NB	В	В	В
					County Road (Cinder Pit) - SB	Big Springs Road – SB	D	D	D
05	SIS	97	8.515	19.036	County Road (Cinder Pit) - NB	Begin Passing Lane – NB	В	В	В
					Begin Passing Lane - SB	County Road (Cinder Pit) – SB	С	С	С
06	SIS	97	19.036	27.718	Begin Passing Lane - NB Tenant Bray Road – NB		С	С	С
					Tenant Bray Road - SB	Begin Passing Lane – SB	D	D	D
07	SIS	97	27.718	29.910	Tenant Bray Road - NB Mount Hebron Summit – NB		D	D	D
					Mount Hebron Summit - SB	Tenant Bray Road – SB	С	С	С
08	SIS	97	29.910	34.304	Mount Hebron Summit - NB	Foot of Grade – NB	С	С	С
					Foot of Grade - SB	Mount Hebron Summit – SB	D	D	D
09	SIS	97	34.304	49.827	Foot of Grade	Agricultural Station	В	В	В
10	SIS	97	49.827	51.349	Agricultural Station	North Dorris City Limit	D	D	Е
11	SIS	97	51.349	54.089	North Dorris City Limit - NB Oregon State Line – NB		В	В	В
					Oregon State Line - SB	North Dorris City Limit – SB	D	D	D

Segment: SIS 1 TCR ID: 097SIS01

#### **General Information:**

Location: Jct I-5 to Jct SR 265 Length Miles/ Length Kilometers: 0.429 / 0.690

PM Begin/End: 0.000 / 0.429 KP Begin/End: 0.000 / 0.690 Lane Miles/ Lane Kilometers: 0.858 / 1.381

**Facility Concept:** 

Present: Two-Lane Conventional
Twenty-Year: Two-Lane Conventional
Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

8' treated shoulders

Design Speed: 35

Clear Recovery Zone: 20' minimum (no curb) 2' min (curb)

**Level of Service:** 

Present LOS: D

20-Year LOS (No Build): E 20-Year LOS (Improved): D

Concept LOS: C/D

**Highway Information:** 

Grade: Level

Terrain: Flat

**Development:** Rural

Percent Non-Passing: 64

Percent Trucks: 9.4

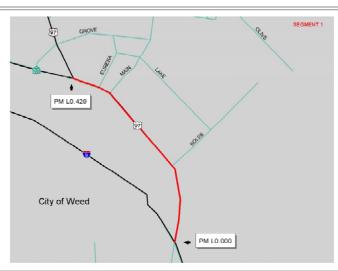
Percent RVs: 1.4

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 19.3

HCM Classification: III

Passing Lane: No



## **Existing Geometrics:**

Average Lane Width L/R (ft): 12.0/12.0

Average Median Width (ft): 12.0

Average Total Shoulder Width L/R (ft): 5.0/5.0

Average Treated Shoulder Width L/R (ft): 0.2/0.2

**General Comments:** Shoulder widths range from 0' to 8'.

Treated shoulder widths range from 0 to 4'.

Travel way width is 12'.

## **System Designations:**

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access:

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

This segment is entirely in the City of Weed. The Weed General Plan land use designation for this segment is single-story mixed use retail. Current land uses include: gas stations, motels, restaurants, gift shops, automobile repair garages, and a bakery.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 30 mph. In the future, a realignment of US 97 out of central Weed may be desirable. It is doubtful that a realignment will be justified within a 20 year time horizon.

Growth Rate: 1.5%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); City of Weed General Plan; Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan -Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

	Tr	affic	Data
--	----	-------	------

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	10100	12100	1150	0.53	93.16	27.14
2012	11615	13915	1322	0.60	94.44	25.69
2022	13130	15730	1494	0.68	95.02	24.20

## **Segment Improvements:**

#### Segment Issues:

**High Traffic Volumes** Low Average Travel Speeds Many Access Points High Percentage Trucks (18%) Left Turn Delay from Main Street to Southbound US 97 Tight turn radius on southbound I-5 on-ramp can create difficulty if exceeding posted speed limit High Pedestrian Activity

#### **Major Improvements Programmed:**

Downtown Weed Roadway Rehabilitation (PM L0.00/0.20) Proposed improvements include: rehabilitate roadway, signalize the US 97/Main Street intersection, 97/265 Wye (keep existing intersection configuration and signalize to coordinate with 97/Main Street signalization or reconfigure the intersection with US 97 as the major leg and SR 265 as the minor leg with no signalization) and upgrade all roadside signs with retrorelfective signs.

#### Improvements to Maintain Concept LOS:

Reconfigure the US 97/SR 265 intersection to allow continuous flows on US 97, or shift 97 to a new location to avoid intersection.

#### Other Potential Improvements:

Provide signing (nonregulatory) to encourage heavy truck traffic to use SR 265 instead of US 97 through central Weed.

## **Environmental Issues:**

**Hazardous Sites:** 

130 sites on one or more state listings.

**Recorded Species of Concern:** 

None

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

**Designations:** State Federal Unclassified Nonattainment PM<sub>10</sub>

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour -1 hour

Not Applicable Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

None

#### **Historical Resources (State Historical):**

None at this location.

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.24
Statewide Average Accident Rate	0.022	0.93
General Comments		<u>,                                    </u>

#### **General Issues:**

Cell coverage is good to fair on the entire route on mobile units with exterior antennas.

The City of Weed has high pedestrian volumes. Future planning and design of projects should take this into consideration.

#### Structures:

Route 5/97 Separation - Bridge Number 02 0170L (PM 0.01) Route 5/97 Separation - Bridge Number 02 0170R (PM 0.02) Weed OH - Bridge Number 02 0082 (PM 0.15)

#### Pavement Issues:

The road currently has several various preventative maintenance treatments over the existing AC section.

A portion of this segment will be rehabilitated as part of the Downtown Weed Roadway Rehabilitation project.

## **Drainage/Hydraulics Issues:**

None.

### Agreements with Local Agencies:

None.

## Truck/Permit Issues:

Right angle turns in Weed can be difficult for permit loads longer than STAA.

## **Congestion/Facility Closure:**

Very limited detour routes along the route. Only two available detour routes that can handle truck traffic.

### Access Issues:

During the summer travel season, traffic can be slowed or stopped on US 97 due to vehicles, bicycles, and pedestrians entering and leaving the highway right of way.

#### **Right of Way Information:**

PM L0.00/0.429 State Title 100'-200'

#### Snow/Ice Issues:

Normally chain control is by signs only.

This route is used as a detour in the event I-5 closes.

#### **Intelligent Transportation Systems:**

In Use: None at this location.

**Programmed:** None at this location

**Proposed:** None at this location

#### Bibliography, Special Studies/Reports:

Siskiyou County Regional Transportation Plan (RTP), 2000 Weed General Plan. 1987

Economic and Demographic Profile Sevices, Siskiyou County, 2001

Segment: SIS 2 TCR ID: 097SIS02

## General Information:

Location: Jct SR 265 to Angel Valley Road Length Miles/ Length Kilometers: 1.391 / 2.239

PM Begin/End: 0.429 / 1.820 KP Begin/End: 0.690 / 2.920 Lane Miles/ Lane Kilometers: 2.782 / 4.477

**Facility Concept:** 

Present: Two-Lane Conventional
Twenty-Year: Two-Lane Conventional
Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: C
20-Year LOS (No Build): D

20-Year LOS (Improved): C

**Concept LOS:** 

Highway Information:

C/D

Grade: Level

Terrain: Flat

Development: Rural

Percent Non-Passing: 78

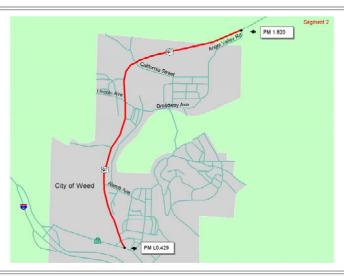
Percent Trucks: 15.8

Percent RVs: 2.2

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 7.2
HCM Classification:

Passing Lane: No



## **Existing Geometrics:**

Average Lane Width L/R (ft): 12.0/12.0

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 8.1/8.7

Average Treated Shoulder Width L/R (ft): 8.1/8.7

**General Comments:** Shoulder widths range from 8' to 15'.

Treated shoulder widths range from 8' to 15'.

Travel way width is 12'.

## **System Designations:**

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

This segment has a mix of land use designations including industrial, residential, and open space.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 50 mph. A pedestrian crossing at the US 97/Lincoln Avenue intersection links residential housing to the west of US 97 with parks, schools, and churches to the east.

Growth Rate: 1.5%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); City of Weed General Plan; Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

<u>Traf</u>	<u>fic</u>	<u>Data</u>	
_			7

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	6000	6300	630	0.23	63.1	45.6
2012	6900	7245	725	0.27	65.4	45.1
2022	7800	8190	819	0.30	68.6	44.5

## **Segment Improvements:**

#### Segment Issues:

High Traffic Volumes Low Average Travel Speeds Multiple Access Points High Percentage Trucks High Pedestrian Activity

#### **Major Improvements Programmed:**

None.

Improvements to Maintain Concept LOS:

None.

#### **Other Potential Improvements:**

Reconfigure US 97/California Street intersection to reduce skew.

Modification to pedestrian crossing at the US 97/Lincoln Avenue intersection, including:

- Consider the use of flourescent yellow green signs for the W54's at the crosswalk and the flashing beacons.
- Increase the size of all of the warning signs in the corridor from 36" to 48".
- Realignment of the crosswalk such that it is perpendicular to the centerline of the highway and will shorten the length from 74 feet to 58 feet in length. This will require the placement of 35 feet of additional sidewalk and a small retaining wall to support the sidewalk at the northeast quadrant of the intersection.
- Interest has been expressed by some members of the community for a pedestrian overcrossing at Lincoln Avenue (would require State/Local partnership).

## **Environmental Issues:**

**Hazardous Sites:** 

One hazardous site.

**Recorded Species of Concern:** 

None

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

Designations:StateFederalPM.0NonattainmentUnclassified

Ozone

**-24 Hour** Attainment Unclassified/Attainment

-8 Hour
 -1 hour
 Not Applicable
 Unclassified/Attainment
 Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

Boles Creek (PM L0.429/0.193) Beaughton Creek (PM 1.395/1.455)

#### Historical Resources (State Historical):

None at this location.

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.053	0.32
Statewide Average Accident Rate	0.026	0.64
General Comments		

# - Bikes are well served with either 8-foot shoulders or 4-foot None shoulders through almost all of the route. - Cell coverage is good to fair on the entire route for mobile units with exterior antennas. - When projects are developed for this route, the intersections within the boundaries of each project should be analyzed for warrants. A likely candidate would be Alamo Avenue (PM 0.62). - The City of Weed has high pedestrian volumes. Future planning and design of projects should take this into consideration. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with None. a score of 7 and 9. The ride quality is average. The road currently has several various preventative maintenance treatments over the existing AC section. Agreements with Local Agencies: **Truck/Permit Issues:** None None. **Congestion/Facility Closure:** Access Issues: None. Very limited detour routes along the route. Only two available detour routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 0.429/1.820 State Title 100'-200' Normally chain control is by signs only. This route is used as a detour in the event I-5 closes. **Intelligent Transportation Systems:** Bibliography, Special Studies/Reports: Siskivou County Regional Transportation Plan (RTP), 2000 In Use: None at this location. Weed General Plan, 1987 **Programmed:** None at this location. Economic and Demographic Profile Sevices, Siskiyou County, 2001 Proposed: None at this location.

Structures:

General Issues:

Segment: SIS 3 TCR ID: 097SIS03

## **General Information:**

Location: Angel Valley Road to Big Springs Road

Length Miles/ Length Kilometers: 2.610 / 4.200

PM Begin/End: 1.820 / 4.430 KP Begin/End: 2.929 / 7.129 Lane Miles/ Lane Kilometers: 5.220 / 8.400

**Facility Concept:** 

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: C
20-Year LOS (No Build): C
20-Year LOS (Improved): C
Concept LOS: C/D

**Highway Information:** 

Grade: Rolling
Terrain: Rolling
Development: Rural

Percent Non-Passing: 71
Percent Trucks: 20.3

Percent RVs: 2.5

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 11.1

HCM Classification:

Passing Lane: No

Big Springs. Rd PM 4.430

Segment 3

PM 1.820

Angel Valley Rd

**Existing Geometrics:** 

Average Lane Width L/R (ft): 11.4/11.4

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 8.0/8.0

Average Treated Shoulder Width L/R (ft): 3.4/3.4

General Comments: Shoulder widths for this segment are 8'.

Treated shoulder widths range from 0' to 8'. Travel way widths range from 11' to 12'.

**System Designations:** 

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

The majority of this segment is agriculture.

## **Segment Description and General Comments:**

The posted speed limit for this segment is 55 mph.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed			
2002	4500	5600	470	0.21	60.9	48.0			
2012	4950	6160	517	0.23	62.1	47.7			
2022	5400	6720	564	0.25	63.2	47.4			

## **Segment Improvements:**

#### Segment Issues:

Average lane width is 11.4 feet. Average treated shoulder width is 3.4 feet.

#### **Major Improvements Programmed:**

None.

## Improvements to Maintain Concept LOS:

None required.

#### Other Potential Improvements:

Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.

Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.

If future traffic volumes warrant, Angel Valley Road should be considered for a southbound left-turn-lane candidate, or northbound right-turn deceleration lane candidate.

## **Environmental Issues:**

**Hazardous Sites:** 

One hazardous site.

**Recorded Species of Concern:** 

None

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

Designations:StateFederalPM.0NonattainmentUnclassified

Ozone

**-24 Hour** Attainment Unclassified/Attainment

-8 Hour
 -1 hour
 Not Applicable
 Unclassified/Attainment
 Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

None

## Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.21
Statewide Average Accident Rate	0.035	0.63
General Comments		

#### **Historical Resources (State Historical):**

None at this location.

General Issues:	Structures:
Bikes are well served with either 8-foot shoulders or 4-foot shoulders through almost all the route.	None
Cell coverage is good to fair on the entire route for mobile units with exterior antennas.	
Metal beam guard rails (MBGR) and end treatment should be upgraded.	
Pavement Issues:	Drainage/Hydraulics Issues:
The 2000 pavement conditions survey finds the surface is failing with a score of 7 and 9. The ride quality is average.	None.
The road currently has several various preventative maintenance treatments over the existing AC section.	
Consider Rumble Strips when putting new pavement in place for 8 foot shoulders.	
Agreements with Local Agencies:	Truck/Permit Issues:
None	None.
Congestion/Facility Closure:	Access Issues:
Very limited detour routes along the route. Only two available detour routes that can handle truck traffic.	None.
Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed.	
Disk SW 16 3	
Right of Way Information:	Snow/Ice Issues:
PM 1.820/2.10 State Title 100'-200' PM 2.10/4.30 State Title 100'-150'	Normally chain control is by signs only.
PM 4.30/4.430 State Title 250'	This route is used as a detour in the event I-5 closes.
In Use: None at this location.	Bibliography, Special Studies/Reports:
	Siskiyou County Regional Transportation Plan (RTP), 2000 Siskiyou County General Plan, 1980
Programmed: None at this location.	Economic and Demographic Profile Sevices, Siskiyou County, 2001

Proposed:

CMS north of Weed (PM 2.00).

TCR ID: 097SIS04 Segment: SIS 4

## **General Information:**

Location: Big Springs Road to County Road (Cinder Pit) Length Miles/ Length Kilometers: 4.085 / 6.574

PM Begin/End: KP Begin/End: 7.129 / 13.704 Lane Miles/ Lane Kilometers: 4.430 / 8.515 8.170 / 13.148

**Facility Concept:** 

Present: Two-Lane Conventional Two-Lane Conventional Twenty-Year: Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

**Typical Section:** 12' lane width

4' treated shoulders

**Design Speed:** 

Clear Recovery Zone: 20' minimum

Level of Service:

**Present LOS:** B/D (North/South) 20-Year LOS (No Build): B/D (North/South) **20-Year LOS (Improved):** B/C (North/South)

**Concept LOS:** C/D

**Highway Information:** 

Grade: Rolling

Terrain: Rolling

**Percent Non-Passing:** 56

**Development:** 

**Percent Trucks:** 32.8

Percent RVs: 1.9

Peak Period Directional Split: 61/39 (South)

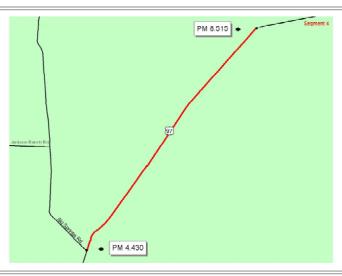
Access Points (per mile): 1.7 **HCM Classification:** 

Yes (2) Passing Lane:

NB 4.80/5.35

Rural

SB 5.17/5.57



**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.0/12.0

Average Median Width (ft): N/A 7.5/7.6 Average Total Shoulder Width L/R (ft): Average Treated Shoulder Width L/R (ft): 7.2/7.3

General Comments: Shoulder widths range from 4' to 8'.

Treated shoulder widths range from 4' to 8'.

Travel way width is 12'.

System Designations:

**Functional Classification:** Rural Principal Arterial

NHS: Yes **Terminal Access:** Yes **IRRS: Nat Truck Network:** Yes No High Emph: Yes STRAHNET: No ITSP Focus: No **Bikes Permitted:** Yes

Frwy/Expwy: Yes-Ex Scenic/Historic:

Yes. Shasta Volcanic Scenic Byway: Lifeline: No

All-Amercian Road

### Significant Land Uses:

The majority of this segment is agriculture and forestland. Lake Shastina is north of this segment along Big Springs Road. Recreation at Lake Shastina includes water skiing, wind surfing, boating, and golfing.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

	Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed	
ĺ	2002	3000	4000	430	0.16 / 0.24	46.6 / 70.7	58.2 / 57.1	
Ī	2012	3300	4400	484	0.18 / 0.28	46.9 / 75.3	57.8 / 56.7	
ĺ	2022	3600	4800	528	0.19 / 0.30	48.8 / 77.4	57.8 / 56.3	

## **Segment Improvements:**

### Segment Issues:

High percentage trucks (33%). Higher directional split southbound (61%). Southbound Percent Time Spent Following is 73%. Climbing lane in the southbound direction is only 0.4 miles in length.

#### **Major Improvements Programmed:**

None.

#### Improvements to Maintain Concept LOS:

Extend the existing southbound climbing lane at PM 5.17/5.57\*.

#### Other Potential Improvements:

Right-turn deceleration lane on southbound US 97 at Big Springs Road\*.

\*Note: If both improvements done, southbound LOS becomes "C".

## **Environmental Issues:**

#### **Hazardous Sites:**

No recorded hazardous sites along this segment.

#### **Recorded Species of Concern:**

Peck's Lomatium

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

**Designations:** State Federal Unclassified Nonattainment PM<sub>10</sub>

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour -1 hour

Not Applicable Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

None

## **Historical Resources (State Historical):**

None at this location.

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.046	0.18
Statewide Average Accident Rate	0.032	0.62
General Comments		<u></u>

## **General Issues:** Structures: Bikes are well served with either 8-foot shoulders or 4-foot shoulders None through almost all the route. Cell coverage is good to fair on the entire route for mobile units with exterior antennas MBGR and end treatment should be upgraded. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with PM 4.8 - PM 5.0 - Vegetation needed below waste area near fill. a score of 7 and 9. The ride quality is average. Route road drainage into stable channel around the waste area. PM 5.58 - Stabilize road drainage to culvert inlet. The road currently has several various preventative maintenance PM 6.00 - Grindings need to be removed and stable over-side drain treatments over the existing AC section. (rock or pipe) installed. PM 7.89 - Over-side drain needed to direct road drainage to inlet & Consider Rumble Strips when putting new pavement in place for 8' shoulders. PM 8.49 - Stabilize over-steep ash deposit & provide reinforcement of catch basin at pipe inlet. Agreements with Local Agencies: Truck/Permit Issues: None None. **Access Issues: Congestion/Facility Closure:** None. Very limited detour routes along the route. Only two available detour routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 4.430/4.60 State Title 250' Normally chain control is by signs only. PM 4.60/5.00 State Title with Access Control 450' Occasional freezing rain. PM 5.00/8.515 State Title with Access Control 150'-240' Due to the mountain terrain, snow removal can cause concerns during an incident. This route is used as a detour in the event I-5 closes. **Intelligent Transportation Systems:** Bibliography, Special Studies/Reports: In Use: None at this location. Siskivou County Regional Transportation Plan (RTP), 2000 Siskivou County General Plan. 1980 Programmed: None at this location. Economic and Demographic Profile Sevices, Siskiyou County, 2001

Proposed:

None at this location.

TCR ID: 097SIS05 Segment: SIS 5

#### **General Information:**

Location: County Road (Cinder Pit) to Beginning Passing Lane Length Miles/ Length Kilometers: 10.521 / 16.931

PM Begin/End: **KP Begin/End:** 13.704 / 30.636 Lane Miles/ Lane Kilometers: 21.042 / 33.864 8.515 / 19.036

**Facility Concept:** 

Present: Two-Lane Conventional Two-Lane Conventional Twenty-Year: Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

**Typical Section:** 12' lane width

4' treated shoulders

**Design Speed:** 

Clear Recovery Zone: 20' minimum

Level of Service:

**Present LOS:** B/C (North/South) 20-Year LOS (No Build): B/C (North/South) **20-Year LOS (Improved):** B/C (North/South)

**Concept LOS:** C/D

**Highway Information:** 

3.31% Grade:

Terrain: Mountainous

**Development:** Rural **Percent Non-Passing:** 52 **Percent Trucks:** 32.8 Percent RVs: 1.9

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 1.4 **HCM Classification:** 

Yes (2) Passing Lane:

NB 8.69/10.45

NB 11.07/17.02



**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.0/12.0 Average Median Width (ft): N/A

3.6/7.7 Average Total Shoulder Width L/R (ft): Average Treated Shoulder Width L/R (ft): 3.4/7.5

**General Comments:** Shoulder widths range from 0' to 8'.

Treated shoulder widths range from 0' to 8'. Travel way widths range from 11 to 16'.

System Designations:

**Functional Classification:** Rural Principal Arterial

NHS: Yes **Terminal Access:** Yes **IRRS: Nat Truck Network:** Yes No High Emph: Yes STRAHNET: No ITSP Focus: No **Bikes Permitted:** Yes

Frwy/Expwy: Yes PM Scenic/Historic:

Yes. Shasta Volcanic Scenic Byway: Lifeline: No

All-Amercian Road

### Significant Land Uses:

The majority of this segment is in the Shasta National Forest, but as US 97 crosses Military Pass Road the highway enters the Klamath National Forest.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph. At Post Mile 12.1, is County Road A-12 (the old SR 99/US 97 cutoff that still links I-5 and US 97).

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

<b>Traffic Data</b>	
---------------------	--

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3100	4700	370	0.32 / 0.16	40.3 / 50.5	55.6 / 57.5
2012	3410	5170	403	0.35 / 0.18	41.3 / 52.5	55.0 / 57.3
2022	3720	5640	440	0.31 / 0.17	43.4 / 54.6	55.2 / 57.1

## **Segment Improvements:**

Segment Issues:

Improvements to Maintain Concept LOS:

None.

None.

**Major Improvements Programmed:** 

**Other Potential Improvements:** 

None.

Additional passing opportunities/turnouts south of County Road A-12 toward Weed.

Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.

Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

## **Environmental Issues:**

**Hazardous Sites:** 

No recorded hazardous sites along this segment.

Air Quality Management District: Siskiyou County APCD

# Recorded Species of Concern :

Cooke's Phacelia Pale Big-Eared Bat Prarie Falcon California Wolverine Air Basin: Northeast Plateau

Designations:StateFederalPM.0NonattainmentUnclassified

Ozone

**-24 Hour** Attainment Unclassified/Attainment

-8 Hour
 -1 hour
 Not Applicable
 Unclassified/Attainment
 Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

Whitney Creek (PM 9.6)

## **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.25
Statewide Average Accident Rate	0.033	0.53
General Comments		

#### **Historical Resources (State Historical):**

No. 517 Emigrant Trail Crossing of Present Highway - PM 14.5 at Military Pass Road.

#### **General Issues:**

Bikes are well served with either 8-foot shoulders or 4-foot shoulders through almost all the route.

Cell coverage is good to fair on the entire route for mobile units with exterior antennas.

MBGR and end treatment should be upgraded.

#### Structures:

Whitney Creek - Bridge Number 02 0083 (PM 9.61) Sheep Rock Cattlepass - Bridge Number 02 0048 (PM R14.65)

#### Pavement Issues:

The 2000 pavement conditions survey finds the surface is failing with a score of 7 and 9. The ride quality is average.

The road currently has several various preventative maintenance treatments over the existing AC section.

Consider Rumble Strips when putting new pavement in place for 8' shoulders.

#### Drainage/Hydraulics Issues:

**PM 9.6 -** Whitney Creek is a glacial out-wash with an unconfined channel that migrates in response to large flow events. This can inundate the highway and leave extensive debris. Channel leading to the culvert crossing needs improvement to prevent erosion of banks and better diversion to the culvert. Approximately 120 feet upstream of culvert a large rock has settled in the channel and is diverting flow and eroding the left bank. **PM 15.9 -** Cut slopes require revegetation. Drainage in NB cut needs AC berm and gutter. Shallow grade at SB drainage outlet causes drainage to settle near highway.

### **Agreements with Local Agencies:**

None

### Truck/Permit Issues:

None.

### **Congestion/Facility Closure:**

Very limited detour routes along the route. Only two available detour routes that can handle truck traffic.

Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed.

### **Access Issues:**

None.

#### **Right of Way Information:**

PM 8.515/9.75 State Title with Access Control 150'-240' PM 9.75/16.55 State Title with Access Control 320'-500' PM 16.55/19.036 State Title

## Snow/Ice Issues:

Normally chain control is by signs only. Occasional freezing rain.

Due to the mountain terrain, snow removal can cause concerns during an incident.

This route is used as a detour in the event I-5 closes.

## **Intelligent Transportation Systems:**

In Use: None at this location.

Programmed: None at this location.

**Proposed:** None at this location.

#### Bibliography, Special Studies/Reports:

Siskiyou County Regional Transportation Plan (RTP), 2000 Siskiyou County General Plan, 1980

Economic and Demographic Profile Sevices, Siskiyou County, 2001

Segment: SIS 6 TCR ID: 097SIS06

### **General Information:**

Location: Beginning Passing Lane to Tenant Bray Road Length Miles/ Length Kilometers: 8.682 / 13.972

PM Begin/End: 19.036 / 27.718 KP Begin/End: 30.635 / 44.601 Lane Miles/ Lane Kilometers: 17.364 / 27.945

**Facility Concept:** 

Present:Two-Lane ConventionalTwenty-Year:Two-Lane ConventionalPost Twenty-Year:Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 70

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: C/D (North/South)

20-Year LOS (No Build): C/D (North/South)

20-Year LOS (Improved): C/C (North/South)

Concept LOS: C/D

**Highway Information:** 

Grade: Rolling
Terrain: Rolling
Development: Rural
Percent Non-Passing: 45

Percent Trucks: 33.9

Percent RVs:

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 1.8
HCM Classification: 1

Passing Lane: Yes (2)

NB 19.04/20.41

1.1

SB 21.635/21.874

PM 19.036

**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.1/12.1

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 9.9/13.2

Average Treated Shoulder Width L/R (ft): 7.4/7.9

**General Comments:** Shoulder widths range from 4' to 18'.

Treated shoulder widths range from 0' to 8'. Travel way widths range from 11 to 16'.

System Designations:

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

The majority of this segment is in the Klamath National Forest.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph. This segment includes the Mount Shasta Vista Point, Grass Lake Maintenance Station, and Grass Lake Rest Area.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3100	4700	370	0.14 / 0.21	51.8 / 68.5	53.6 / 57.3
2012	3410	5170	403	0.15 / 0.23	52.7 / 70.7	53.3 / 57.0
2022	3720	5640	440	0.16 / 0.25	53.6 / 72.9	53.0 /56.7

## **Segment Improvements:**

#### Segment Issues:

High percentage trucks (34%). Higher directional split southbound (61%). Southbound Percent Time Spent Following is 71%. Climbing lane in the southbound direction is only 0.25 miles in length.

#### **Major Improvements Programmed:**

None.

#### Improvements to Maintain Concept LOS:

Extend the existing southbound climbing lane (PM 21.63/21.88).

#### Other Potential Improvements:

Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.

Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.

## **Environmental Issues:**

#### **Hazardous Sites:**

No recorded hazardous sites along this segment.

#### **Recorded Species of Concern:**

Bald Eagle Greater Sandhill Crane California Tiger Salamander Newberry's Cinquefoil

#### **FEMA Mapped Flood Plains:**

Grass Lake (PM 20.44/23.12)

#### **Historical Resources (State Historical):**

None at this location.

#### Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

**Designations:** State Federal Unclassified PM<sub>10</sub> Nonattainment

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour -1 hour

Not Applicable Unclassified/Attainment

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.13
Statewide Average Accident Rate	0.037	0.63
General Comments		<u></u>

General Issues:	<u>Structures:</u>
Bikes are well served with either 8-foot shoulders or 4-foot shoulders through almost all the route.	None
Cell coverage is good to fair on the entire route for mobile units with exterior antennas.	
MBGR and end treatment should be upgraded.	
Pavement Issues:	<u>Drainage/Hydraulics Issues:</u>
The 2000 pavement conditions survey finds the surface is failing with a score of 7 and 9. The ride quality is average.	None.
The road currently has several various preventative maintenance treatments over the existing AC section.	
Consider Rumble Strips when putting new pavement in place for 8' shoulders.	
Agreements with Local Agencies:	Truck/Permit Issues:
None	None.
Congestion/Facility Closure:	Access Issues:
Very limited detour routes along the route. Only two available detour	None.
routes that can handle truck traffic.	TKONG.
Detoured traffic in winter months depend on the County Maintenance	
crews keeping the detours plowed.	
Right of Way Information:	Snow/Ice Issues:
PM 19.036/27.718 State Title	Normally chain control is by signs only.
	Occasional freezing rain.
	Due to the mountain terrain, snow removal can cause concerns during an incident.
	This route is used as a detour in the event I-5 closes.
Intelligent Transportation Systems:	Bibliography, Special Studies/Reports:
In Use: CCTV at Grass Lake Maint.Station (PM 20.19)	Siskiyou County Regional Transportation Plan (RTP), 2000
Programmed: None at this location.	Siskiyou County General Plan, 1980 Economic and Demographic Profile Sevices, Siskiyou County, 2001
	Economic and Demographic Profile Sevices, Siskiyou County, 2001
Proposed: None at this location.	

Segment: SIS 7 TCR ID: 097SIS07

### **General Information:**

Location: Tenant Bray Road to Mt. Hebron Summit

Length Miles/ Length Kilometers: 2.192 / 3.528

PM Begin/End: 27.718 / 29.910 KP Begin/End: 44.608 / 48.135 Lane Miles/ Lane Kilometers: 4.384 / 7.055

**Facility Concept:** 

Present:Two-Lane ConventionalTwenty-Year:Two-Lane ConventionalPost Twenty-Year:Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 70

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: D/C (North/South)

20-Year LOS (No Build): D/C (North/South)

20-Year LOS (Improved): C/C (North/South)

Concept LOS: C/D

**Highway Information:** 

**Grade:** 4.31%

Terrain: Mountainous

Development:RuralPercent Non-Passing:66Percent Trucks:33.8Percent RVs:3.1

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 1.4
HCM Classification:

Passing Lane: Yes (1)

NB 28.78/30.14

Segment 7
Mount Hebron Summit

PM 29.910

PM 27.718

**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.0/12.0

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 11.1/13.0

Average Treated Shoulder Width L/R (ft): 5.6/8.0

**General Comments:** Shoulder widths range from 9' to 13'.

Treated shoulder widths range from 4' to 8'.

Travel way width is 12'.

**System Designations:** 

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

The majority of this segment is in the Klamath National Forest.

## **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

Troffic Data

<u>iranic Data</u>						
Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3100	4700	370	0.34 / 0.16	57.1 / 52.5	49.0 / 57.4
2012	3410	5170	403	0.37 / 0.18	60.2 / 54.4	48.3 / 57.1

## 5640 440 0.40/0.17 62.8 / 56.5 47.3 / 57.3

## **Segment Improvements:**

Segment Issues:

2022

Mountainous segment with high percentage trucks (34%).

3720

**Major Improvements Programmed:** 

None.

Improvements to Maintain Concept LOS:

Extend existing northbound climbing lane before Mount Hebron Summit.

Other Potential Improvements:

None.

## **Environmental Issues:**

**Hazardous Sites:** 

No recorded hazardous sites along this segment.

**Recorded Species of Concern:** 

Greater Sandhill Crane

**Air Quality:** 

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

**Designations:** State Federal Unclassified Nonattainment PM<sub>10</sub>

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour

-1 hour Not Applicable Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

Horsethief Creek (PM 28.78/28.84)

**Historical Resources (State Historical):** 

None at this location.

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.69
Statewide Average Accident Rate	0.035	0.57
General Comments		

General Issues:  Bikes are well served with either 8-foot shoulders or 4-foot shoulders through almost all the route.  Cell coverage is good to fair on the entire route for mobile units with exterior antennas.	Structures: None
MBGR and end treatment should be upgraded.	
Pavement Issues:	Drainage/Hydraulics Issues:
The 2000 pavement conditions survey finds the surface is failing with a score of 7 and 9. The ride quality is average.	None.
The road currently has several various preventative maintenance treatments over the existing AC section.	
Consider Rumble Strips when putting new pavement in place for 8' shoulders.	
Agreements with Local Agencies:	Truck/Permit Issues:
None None	None.
Congestion/Facility Closure:	Access Issues:
Very limited detour routes along the route. Only two available detour routes that can handle truck traffic.	None.
Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed.	
Right of Way Information:	Snow/Ice Issues:
PM 27.718/29.910 State Title	Normally chain control is by signs only. Occasional freezing rain. Due to the mountain terrain, snow removal can cause concerns during an incident. This route is used as a detour in the event I-5 closes.
Intelligent Transportation Systems:	Bibliography, Special Studies/Reports:
In Use: None at this location.	Siskiyou County Regional Transportation Plan (RTP), 2000
Programmed: None at this location.	Siskiyou County General Plan, 1980
1. 1- Statistica: 110110 at till 100ation.	Economic and Demographic Profile Sevices, Siskiyou County, 2001

Proposed:

CCTV at Mt. Hebron Summit (PM 29.91) RWIS at Mt. Hebron Summit (PM 29.91)

Segment: SIS 8 TCR ID: 097SIS08

### **General Information:**

Location: Mt. Hebron Summit to Foot of Mt. Hebron Grade Length Miles/ Length Kilometers: 4.394 / 7.071

PM Begin/End: 29.910 / 34.304 KP Begin/End: 48.135 / 55.207 Lane Miles/ Lane Kilometers: 8.788 / 14.14

**Facility Concept:** 

Present:Two-Lane ConventionalTwenty-Year:Two-Lane ConventionalPost Twenty-Year:Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 70

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: C/D (North/South)

20-Year LOS (No Build): C/D (North/South)

20-Year LOS (Improved): C/C (North/South)

Concept LOS: C/D

**Highway Information:** 

**Grade:** 4.05%

Terrain: Mountainous

Development:RuralPercent Non-Passing:62Percent Trucks:33.8Percent RVs:3.1

Peak Period Directional Split: 61/39 (South)

Access Points (per mile): 1.4
HCM Classification:

Passing Lane: Yes (1)

30.05/32.93



**Existing Geometrics:** 

Average Lane Width L/R (ft): 11.7/11.7

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 12.8/12.6

Average Treated Shoulder Width L/R (ft): 7.9/5.5

**General Comments:** Shoulder widths range from 9' to 18'.

Treated shoulder widths range from 4' to 10'. Travel way widths range from 11' to 12'.

**System Designations:** 

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: No Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

The majority of this segment is in the Klamath National Forest.

## **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

		Traffic Data
DΤ	Peak	Peak

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3100	4700	370	0.16 / 0.62	52.4 / 53.6	51.8 / 52.0
2012	3410	5170	403	0.18 / 0.68	54.3 / 56.2	51.6 / 51.1
2022	3720	5640	440	0.17 / 0.74	56.3 / 56.8	51.8 / 50.1

## **Segment Improvements:**

Segment Issues:

Mountainous segment with high percentage trucks (34%).

**Major Improvements Programmed:** 

None.

Improvements to Maintain Concept LOS:

Extend existing southbound climbing lane before Mount Hebron Summit.

Other Potential Improvements:

None.

## **Environmental Issues:**

**Hazardous Sites:** 

No recorded hazardous sites along this segment.

**Recorded Species of Concern:** 

Greater Sandhill Crane Bald Eagle Swainson's Hawk

#### **FEMA Mapped Flood Plains:**

None

**Historical Resources (State Historical):** 

None at this location.

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

**Designations: State** Federal Unclassified PM<sub>10</sub> Nonattainment

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour Not Applicable -1 hour Unclassified/Attainment

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.086	0.43
Statewide Average Accident Rate	0.034	0.54
General Comments		

# **General Issues:** Structures: Bikes are well served with either 8-foot shoulders or 4-foot shoulders None through almost all the route. Cell coverage is good to fair on the entire route for mobile units with exterior antennas. MBGR and end treatment should be upgraded. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with PM 31.0 - PM 33.2 - Remove or stabilize grindings used as shoulder a score of 7 and 9. The ride quality is average. backing in cuts and place curb and gutter in cut areas. Re-establish vegetation on cut slopes (add to existing). The road currently has several various preventative maintenance treatments over the existing AC section. Consider Rumble Strips when putting new pavement in place for 8' shoulders. Agreements with Local Agencies: **Truck/Permit Issues:** None None. **Congestion/Facility Closure: Access Issues:** Very limited detour routes along the route. Only two available detour None. routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 29.910/34.10 State Title Normally chain control is by signs only. PM 34.10/34.304 State Title with Access Control 200' Occasional freezing rain. Due to the mountain terrain, snow removal can cause concerns during an incident. This route is used as a detour in the event I-5 closes. **Intelligent Transportation Systems: Bibliography, Special Studies/Reports:** In Use: None at the location. Siskiyou County Regional Transportation Plan (RTP), 2000 Siskivou County General Plan. 1980 **Programmed:** None at this location. Economic and Demographic Profile Sevices, Siskiyou County, 2001

Proposed:

CCTV at Mt. Hebron Summit (PM 29.91) RWIS at Mt. Hebron Summit (PM 29.91)

Segment: SIS 9 TCR ID: 097SIS09

#### **General Information:**

Location: Foot of Mt. Hebron Grade to Dorris Inspection Station Length Miles/ Length Kilometers: 15.523 / 24.981

PM Begin/End: 34.304 / 49.827 KP Begin/End: 55.207 / 80.189 Lane Miles/ Lane Kilometers: 31.046 / 49.963

**Facility Concept:** 

Present: Two-Lane Conventional
Twenty-Year: Two-Lane Conventional
Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

Typical Section: 12' lane width

4' treated shoulders

Design Speed: 70

Clear Recovery Zone: 20' minimum

**Level of Service:** 

Present LOS: B
20-Year LOS (No Build): B
20-Year LOS (Improved): B
Concept LOS: C/D

**Highway Information:** 

Grade: N/A
Terrain: Flat

Development: Rural

Percent Non-Passing: 20

Percent Trucks: 24.0
Percent RVs: 5.0

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 3.9

HCM Classification: |
Passing Lane: No

City of Dorris

PM 34.304

Agricultural Inspection Station

MACDOEL

Red Rook Rd

Poot of Grade

PM 34.304

**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.1/12.1

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 8.6/10.5

Average Treated Shoulder Width L/R (ft): 7.5/7.5

**General Comments:** Shoulder widths range from 7' to 18'.

Treated shoulder widths range from 0' to 8'. Travel way widths range from 12' to 13'.

**System Designations:** 

Functional Classification: Rural Principal Arterial

NHS: Yes Terminal Access: Yes IRRS: Yes Nat Truck Network: No High Emph: Yes STRAHNET: No ITSP Focus: No Bikes Permitted: Yes

Frwy/Expwy: Scenic/Historic:

Lifeline: No Yes. Shasta Volcanic Scenic Byway:

All-Amercian Road

### Significant Land Uses:

This segment passes through the Butte Valley, where the primary land use is agriculture. Northwest of US 97 is the Butte Valley Wildlife Area and Meiss Lake. Also located in this segment, adjacent to US 97, is the Klamath National Forest.

## **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph, except near Macdoel (PM 39.90/40.60) where it is posted 55 mph.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

<u>Traffic Data</u>						
Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3350	5300	400	0.17	45.2	58.2
2012	3685	5830	431	0.18	47.3	57.9
2022	4020	6360	471	0.18	49.8	58.0

## **Segment Improvements:**

Segment Issues:

Improvements to Maintain Concept LOS:

None.

None.

**Major Improvements Programmed:** 

Other Potential Improvements:

None.

Sam's Neck Road (PM 45.248) is ranked # 70 on the 2002 Left Turn Lane Candidate List.

Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.

**Air Quality:** 

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

## **Environmental Issues:**

**Hazardous Sites:** 

No recorded hazardous sites along this segment.

Air Quality Management District: Siskiyou County APCD

**Recorded Species of Concern:** 

Greater Sandhill Crane Newberry's Cinquefoil Swainson's Hawk Moss Phlox

Air Basin: Northeast Plateau

**Designations:** State Federal Unclassified PM<sub>10</sub> Nonattainment

**Ozone** 

-24 Hour Attainment Unclassified/Attainment

Not Applicable Unclassified/Attainment -8 Hour -1 hour Not Applicable Unclassified/Attainment

**Accident Data:** 

### **FEMA Mapped Flood Plains:**

None

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.21
Statewide Average Accident Rate	0.039	0.49
Conoral Comments		-

## **Historical Resources (State Historical):**

None at this location.

## **General Issues:** Structures: Bikes are well served with either 8-foot shoulders or 4-foot shoulders None through almost all the route. Cell coverage is good to fair on mobile units with exterior antennas. MBGR and end treatment should be upgraded. Vera Cruz Street (PM 40.28) has existing Utility owned and maintained lighting. For locations where the State currently participates in the costs, if warranted, the lighting should be replaced with State owned lighting. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with None. a score of 7 and 9. The ride quality is average. The road currently has several various preventative maintenance treatments over the existing AC section. Consider Rumble Strips when putting new pavement in place for 8' shoulders. Agreements with Local Agencies: **Truck/Permit Issues:** None None. **Access Issues: Congestion/Facility Closure:** None. Very limited detour routes along the route. Only two available detour routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 34.304/34.60 State Title with Access Control 200' Normally chain control is by signs only. PM 34.60/40.00 State Title 130'-250' Occasional freezing rain. PM 40.00/49.20 StateTitle 130'-290' Due to the mountain terrain, snow removal can cause concerns PM 49.20/49.827 Special-Prescritpive (based on historical use, no during an incident. width is available) This route is used as a detour in the event I-5 closes. **Intelligent Transportation Systems: Bibliography, Special Studies/Reports:** In Use: CCTV at Mt. Hebron WIM (PM 34.45). Siskivou County Regional Transportation Plan (RTP), 2000 Siskivou County General Plan. 1980 Programmed: None at this location. Economic and Demographic Profile Sevices, Siskiyou County, 2001

Proposed:

None at this location.

Segment: SIS TCR ID: 097SIS10 10

#### **General Information:**

Location: Dorris Inspection Station to North Dorris City Limits Length Miles/ Length Kilometers: 1.522 / 2.449

80.189 / 82.638 3.044 / 4.899 PM Begin/End: 49.827 / 51.349 **KP Begin/End:** Lane Miles/ Lane Kilometers:

**Facility Concept:** 

Present: Two-Lane Conventional Two-Lane Conventional Twenty-Year: Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

**Typical Section:** 12' lane width

8' treated shoulders

**Design Speed:** 

Clear Recovery Zone: 20' minimum (no curb) 2' min (curb)

Level of Service:

D **Present LOS:** 

20-Year LOS (No Build): E 20-Year LOS (Improved): C

**Concept LOS:** C/D

**Highway Information:** 

Grade: N/A

Terrain: Flat

**Development:** Rural

**Percent Non-Passing:** 100

**Percent Trucks:** 20.2 Percent RVs: 5.1

Peak Period Directional Split: 57/43 (North)

Access Points (per mile): 99.0 **HCM Classification:** Ш No Passing Lane:

PM 51.349 City of PM 49.827

**Existing Geometrics:** 

Average Lane Width L/R (ft): 13.9/13.9

Average Median Width (ft): N/A 7.6/7.6 Average Total Shoulder Width L/R (ft): Average Treated Shoulder Width L/R (ft): 6.0/6.0

**General Comments:** Shoulder widths range from 5' to 10'.

Treated shoulder widths range from 0' to 10'. Travel way widths range from 12' to 16'.

System Designations:

**Functional Classification:** Rural Principal Arterial

NHS: Yes **Terminal Access:** Yes **IRRS: Nat Truck Network:** Yes No High Emph: Yes STRAHNET: No ITSP Focus: No **Bikes Permitted:** Yes

Frwy/Expwy: No Scenic/Historic:

Yes. Shasta Volcanic Scenic Byway: Lifeline: No

All-Amercian Road

### Significant Land Uses:

The existing US 97 alignment serves as Main Street in Dorris. Dorris has mixed uses of residential, commercial, and light industrial. US 97 is paralleled by the UP railroad, and there are two railroad at-grade crossings (Post Miles 50.2 and 51.1).

### **Segment Description and General Comments:**

Currently, the posted speed limit for this segment is 40 mph. There is a southbound traffic controlled Agricultural Inspection Station at PM 49.82. There is a short section (PM 50.4/50.5) between the built up portion of Dorris and the Agricultural Inspection Station where treated shoulders are zero.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); City of Dorris General Plan; Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff.

	Traine Bata						
	Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
	2002	4350	5300	470	0.22	100	36.39
Ī	2012	4785	5830	519	0.25	100	36.05
ſ	2022	5220	6360	566	0.27	100	35.72

## **Segment Improvements:**

#### Segment Issues:

Increased Traffic Volumes
Low Average Travel Speeds
Many Access Points
High Percentage Trucks (25%)
Nonstandard design including three 15-mph curves
Railroad delays
Potential for hazardous waste spills

#### **Major Improvements Programmed:**

\*Dorris Realignment (PM 49.3/51.9)

Proposed project scope is to construct an access-controlled section of US 97 on a new alignment in the vicinity of Dorris. This new alignment will improve the design speed of the state highway, realign nonstandard curves, move truck and through-traffic outside

of Dorris and provide a grade separation from the railroad.

\*The Siskiyou County Local Transportation Commission (LTC) passed a resolution of "non-support" for the Dorris Realignment project on May 7, 2003. This resolution also states that the LTC will seek to unprogram the project.

#### Improvements to Maintain Concept LOS:

Highway realignment in Dorris.

Other Potential Improvements:

None.

## **Environmental Issues:**

#### **Hazardous Sites:**

No recorded hazardous sites along this segment.

#### **Recorded Species of Concern:**

Swainson's Hawk Bald Eagle Bank Swallow

#### **FEMA Mapped Flood Plains:**

None

#### **Historical Resources (State Historical):**

None at this location.

#### **Air Quality:**

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

Designations:StateFederalPM10NonattainmentUnclassified

Ozone

**-24 Hour** Attainment Unclassified/Attainment

-8 Hour
 -1 hour
 Not Applicable
 Unclassified/Attainment
 Unclassified/Attainment

#### **Accident Data:**

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.36
Statewide Average Accident Rate	0.034	0.57
General Comments		<u>,                                      </u>

# **General Issues:** Structures: Bikes are well served with either 8-foot shoulders or 4-foot shoulders None through almost all the route. Cell coverage is good to fair on the entire route for mobile units with exterior antennas. Butte and Fourth Street (PM 50.40), Fourth and Main Street (PM 50.59) and Pine Street (PM 50.95) all have existing Utility owned and maintained lighting. For locations where the State currently participates in the costs, if warranted, the lighting should be replaced with State owned lighting. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with None. a score of 7 and 9. The ride quality is average. The road currently has several various preventative maintenance treatments over the existing AC section. Agreements with Local Agencies: Truck/Permit Issues: None Right angle turns have been modified to handle STAA trucks. Those same turns can be difficult for permit loads longer than STAA. Access Issues: **Congestion/Facility Closure:** Multiple access points to businesses. Very limited detour routes along the route. Only two available detour routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 49.827/50.20 Special-Prescritpive (based on historical use and Normally chain control is by signs only. no width is available) Occasional freezing rain. Due to the mountain terrain, snow removal can cause concerns

PM 50.20/51.30 State Title 60'-80'

PM 51.30/51.349 State Title with Access Control 170'-240'

during an incident

This route is used as a detour in the event I-5 closes.

#### **Intelligent Transportation Systems:**

In Use: None at this location.

Programmed: None at this location.

Proposed: CCTV at Dorris Inspection Station (PM 49.83).

RWIS at Dorris Inspection Station (PM 49.83).

HAR in Dorris (PM 51.00).

## Bibliography, Special Studies/Reports:

Siskivou County Regional Transportation Plan (RTP), 2000

Dorris General Plan, 1992

Economic and Demographic Profile Sevices, Siskiyou County, 2001

Segment: SIS TCR ID: 097SIS11 11

#### **General Information:**

Location: North Dorris City Limits to Siskiyou County/Oregon State Line Length Miles/ Length Kilometers: 2.740 / 4.410

**KP Begin/End:** 82.628 / 87.048 Lane Miles/ Lane Kilometers: PM Begin/End: 51.349 / 54.089 5.480 / 8.820

**Facility Concept:** 

Present: Two-Lane Conventional Two-Lane Conventional Twenty-Year: Post Twenty-Year: Two-Lane Conventional

**Design Concept:** 

**Typical Section:** 12' lane width

4' treated shoulders

**Design Speed:** 

Clear Recovery Zone: 20' minimum

Level of Service:

**Present LOS:** B/D (North/South) 20-Year LOS (No Build): B/D (North/South) **20-Year LOS (Improved):** B/C (North/South)

**Concept LOS:** C/D

**Highway Information:** 

Rural

3.52% Grade:

Terrain: Rolling

**Development: Percent Non-Passing:** 31

**Percent Trucks:** 25.3

Percent RVs: 6.1

Peak Period Directional Split: 57/43 (North)

Access Points (per mile): 5.1 **HCM Classification:** 

Yes (2) Passing Lane:

SB 51.45/52.30

NB 51.39/52.36



**Existing Geometrics:** 

Average Lane Width L/R (ft): 12.0/12.6

Average Median Width (ft): N/A 5.8/6.1 Average Total Shoulder Width L/R (ft): Average Treated Shoulder Width L/R (ft): 5.8/6.1

**General Comments:** Shoulder widths range from 2' to 8'.

Treated shoulder widths range from 2' to 8'.

Travel way width is 12'.

System Designations:

**Functional Classification:** Rural Principal Arterial

NHS: Yes **Terminal Access:** Yes **IRRS: Nat Truck Network:** Yes No High Emph: Yes STRAHNET: No ITSP Focus: No **Bikes Permitted:** Yes

Frwy/Expwy: Yes-Ex Scenic/Historic:

Yes. Shasta Volcanic Scenic Byway: Lifeline: No

All-Amercian Road

### Significant Land Uses:

This segment of US 97 is fully access controlled, with few local roads, limiting any possible future development.

### **Segment Description and General Comments:**

The posted speed limit for this segment is 65 mph. Tight turn radius (northbound) on the SR 161 off-ramp can create difficulty if exceeding the posted speed limit.

Growth Rate: 1.0%. The following references were considered in developing the traffic growth forecasts: Department of Transportation Traffic Volumes - AADT Historical Growth Rate (1970-2000); Department of Finance Population Estimates - Current and Projected; Siskiyou County Regional Transportation Plan - ADT Growth Rate and Population Growth Rates; Siskiyou County General Plan - Growth Rate and General Land Use Comments; Siskiyou County Regional Transportation Planning Agency and Siskiyou County Planning Department Staff; Oregon Department of Transportation U.S. Highway 97 Corridor Strategy (1995).

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2002	3700	5000	410	0.21 / 0.16	44.5 / 59.2	59.0 / 58.3
2012	4070	5500	451	0.23 / 0.17	47.7 / 60.1	58.6 / 57.9
2022	4440	6000	492	0.25 / 0.19	49.7 / 60.0	58.2 / 57.9

## **Segment Improvements:**

Segment Issues:

Improvements to Maintain Concept LOS:

Mountainous segment with high percentage trucks (25%)

Extend existing southbound climbing lane at Dorris Hill.

**Major Improvements Programmed:** 

**Other Potential Improvements:** 

Asphalt Resurfacing at Dorris Hill (PM 52.3/54.1). Project includes grinding dig outs, AC overlay and guardrail upgrade.

Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.

## **Environmental Issues:**

**Hazardous Sites:** 

No recorded hazardous sites along this segment.

Air Quality Management District: Siskiyou County APCD

**Recorded Species of Concern:** 

Bank Swallow Swainson's Hawk Air Basin: Northeast Plateau

Ozone

**-24 Hour** Attainment Unclassified/Attainment

**Air Quality:** 

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

-8 Hour
 -1 hour
 Not Applicable
 Unclassified/Attainment
 Unclassified/Attainment

### **FEMA Mapped Flood Plains:**

None

# Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 01, 1997 - December 30, 2001)

	Fatality	Fatal + Injury
Actual Accident Rate	0.000	0.38
Statewide Average Accident Rate	0.019	0.45
General Comments	<u> </u>	

## **Historical Resources (State Historical):**

None at this location.

## **General Issues:** Structures: Bikes are well served with either 8-foot shoulders or 4-foot shoulders None through almost all the route. Cell coverage is good to fair on the entire route for mobile units with exterior antennas. MBGR and end treatment should be upgraded. Jct 97/161 (PM 53.81) has existing Utility owned and maintained lighting. For locations where the State currently participates in the costs, if warranted, the lighting should be replaced with State owned lighting. Pavement Issues: **Drainage/Hydraulics Issues:** The 2000 pavement conditions survey finds the surface is failing with None. a score of 7 and 9. The ride quality is average. The road currently has several various preventative maintenance treatments over the existing AC section. Consider Rumble Strips when putting new pavement in place for 8' shoulders. Agreements with Local Agencies: **Truck/Permit Issues:** None None. Access Issues: **Congestion/Facility Closure:** None. Very limited detour routes along the route. Only two available detour routes that can handle truck traffic. Detoured traffic in winter months depend on the County Maintenance crews keeping the detours plowed. **Right of Way Information:** Snow/Ice Issues: PM 51.349/54.08 State Title with Access Control 170'-240' Normally chain control is by signs only. Occasional freezing rain. Due to the mountain terrain, snow removal can cause concerns during an incident. This route is used as a detour in the event I-5 closes. **Intelligent Transportation Systems:** Bibliography, Special Studies/Reports: Siskiyou County Regional Transportation Plan (RTP), 2000 In Use: RAWS and CCTV at Dorris Hill (PM 52.00) Economic and Demographic Profile Services, Siskiyou County, 2001 **Programmed:** None at this location. Siskiyou County General Plan. 1980 Oregon Department of Transportation U.S. Highway 97 Corridor Strategy, 1995 Proposed: CMS north of Dorris (PM 52.36).

# Appendix A: Glossary

## Aa

Access Control: The condition where the right of owners or occupants of abutting land or other persons to access a highway is fully or partially controlled by public authority.

Access Management: Involves managing where vehicles enter the highway to improve highway operations and reduce accidents.

Access Point: Location where vehicles can enter or exit a highway.

<u>Adoption:</u> California Transportation Commission (CTC) establishment of a specific highway route location.

<u>Air Basin:</u> An area or territory that contains similar meteorological and geographical conditions. In California, the Air Resources Board (ARB) has established nine air basins.

All-Way Stop Control: An intersection with stop signs at all approaches.

Annual Average Daily Traffic (AADT): Daily traffic that is averaged over a calendar year or fiscal year.

<u>Arterial:</u> A class of street that primarily serves through-traffic and major traffic movements.

<u>Arterial Highway:</u> A general term denoting a highway primarily used by through traffic usually on a continuous route.

<u>Auxiliary Lane:</u> The portion of the roadway for weaving, truck climbing, speed change, or other purposes supplementary to through traffic movement.

Average Daily Traffic (ADT): The average number of vehicles passing a specified point during a 24-hour period. Frequently used in relation to the "peak-month" average daily traffic.

Average Lane Width: The average width of a travel lane. It is a weighted average of all lane widths found in the facility segment under consideration.

<u>Average Median Width:</u> The weighted average of all median widths found in the facility segment under consideration.

<u>Average Travel Speed (ATS):</u> A performance measure used to estimate level of service on a two-lane highway. The facility length divided by the average travel time of all vehicles traversing the facility, including all stopped delay times.

<u>Average Shoulder Width:</u> The weighted average of all shoulder widths found in the facility segment under consideration.

## Bh

**<u>Bypass:</u>** An arterial highway that permits traffic to avoid part or all of an urban area

<u>Bike Route Class:</u> Classification of a bicycle facility. There are three classes: Class I (bicycle facility separate from roadway), Class II (designated bicycle facility adjacent to roadway), Class III (non-designated but open to bicycles).

### Сc

<u>California Environmental Quality Act (CEQA):</u> 1970 State legislation that requires that State agencies regulate activities with major consideration for environmental protection.

<u>California Transportation Investment System Tool (CTIS):</u> A tool that visually displays, using GIS software, where transportation investment is currently underway (programmed) and where it is planned over the next 20 years.

<u>Caltrans or Department:</u> California Department of Transportation

<u>Capacity:</u> The maximum number of vehicles or persons that can pass a point on a roadway during a specified time period (usually one hour) under prevailing roadway, traffic and control conditions.

<u>Capacity Expansion:</u> New facilities and operational improvements, which add through lanes.

<u>Carbon Monoxide (CO):</u> A product of incomplete burning of fuel, produced by motor vehicles (the primary source), home heating, and, to a lesser extent, industrial activities.

<u>Carpool:</u> A group of people who share automobile transportation to designated destinations, usually alternating drivers and vehicles.

<u>Changeable Message Signs (CMS):</u> Electronic signs that can change the message it displays. Often used on highways to warn and redirect traffic. Also referred to as variable or electronic message signs.

<u>Channelization</u>: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.

<u>Clear Recovery Zone:</u> An area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear recovery area of 20 feet on conventional highways and 30 feet on freeways and high speed expressways is desirable.

<u>Climbing lane:</u> A lane added on an uphill grade for use by trucks, recreational vehicles and other heavy vehicles with speeds significantly reduced by grade.

Closed Circuit Television (CCTV): This ITS technology allows a camera to display remote verification of road and weather conditions, traffic conditions and incidents. This CCTV camera will have compatibility with other communication technologies, such as, cable TV, kiosks and the Internet.

<u>Collector:</u> A roadway providing land access and traffic circulation within residential, commercial and industrial areas.

<u>Concept:</u> A strategy for future improvements that will reduce congestion or maintain the existing level of service on a specific route.

<u>Continuous left-turn lane:</u> A lane that simultaneously serves left turning vehicles traveling in opposite directions.

<u>Conformity:</u> Process to assess the compliance of any Federally funded or approved transportation plan, program, or project with

air quality implementation plans. The conformity process is defined by the Clean Air Act.

<u>Congestion:</u> Defined as, reduced speeds of less than 35 miles per hour for longer than 15 minutes.

<u>Controlled Access Highway:</u> In situations where the Director or the California Transportation Commission (CTC) has determined it advisable, a facility may be designated a "controlled access highway" in lieu of the designation "freeway". All statutory provisions pertaining to freeways and expressways apply to controlled access highways.

<u>Conventional Highway:</u> A highway without control of access, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

<u>Corridor:</u> A set of essentially parallel transportation facilities for moving people and goods between two points.

<u>Crawl Speed:</u> The maximum sustained speed that can be maintained by a specified type of vehicle on a constant upgrade of a given percent.

## **D**d

<u>Daily Vehicle Miles of Travel:</u> An estimate of Annual Vehicle Miles of Travel is the product of AADT X Segment Length X 365 days

<u>Deceleration Lane:</u> A short auxiliary lane that allows right-turning vehicles to slow prior to turning.

<u>**Delay:**</u> The time lost while traffic is impeded by some element over which the driver has no control.

<u>Density:</u> The number of vehicles per mile (or per lane per mile) on the traveled way at a given instant.

<u>Design Exception:</u> Written record that documents the engineering decisions leading to the exception from a design standard. Exceptions are possible for both mandatory and advisory design standards

<u>Design Speed:</u> A speed selected to establish specific minimum geometric (horizontal, vertical, site distance) design elements for a particular section of highway.

**District:** Department of Transportation Districts

<u>Divided Highway:</u> A highway with separated roadbeds for traffic in opposing directions.

## Ee

**Easement:** A right to use or control the property of another for designated purposes.

**Encroachment:** Occupancy of project right-of-way by non-project structures or objects of any kind or character.

**Environmental Impact Report (EIR):** A detailed statement setting forth the environmental effects and considerations pertaining to a project as specified in California Environmental Quality Act (CEQA), and may mean either a Draft or a Final EIR.

Environmental Impact Statement (EIS): An environmental impact document prepared pursuant to the National Environmental Policy Act (NEPA) of 1969. The Federal government uses the term EIS in the place of the environmental impact report (EIR), which is used in CEQA.

Environmental Scoping Tool: A tool that visually displays, using GIS software, where habitats, species and hazardous sites are currently located.

**Exclusive Turn Lane:** A storage area designated to only accommodate left or right turning vehicles.

**Expressway:** An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

## Ff

Facility Concept: General term used to describe the number of lanes and degree of access control on a State Route or Freeway. The term can be used to describe the existing facility or the future facility that will be required to handle projected traffic volumes within adopted level of service standards.

Fatal Plus Injury Actual: Contains specific data for accidents that are State highway related. Each accident record contains a ramp, intersection or highway post-mile address that ties it to the highway database.

Fatal Plus Injury Average: The Statewide Average Accident Rate (SWA) is based on a rated segment. The accident-rating factor (ARF) indicates how the existing segment compares to other segments on the State Highway System. The ARF is a comparison of then segment's accident rate to the statewide average accident rate for roads of the same type and having similar characteristics. Accident severity as well as accident frequency is considered in calculating the ARF.

Fatal Plus Injury per Million Vehicle Miles: The fatality rate of those killed in vehicles plus the injury rare of those injured in vehicles

Federal Highway Administration (FHWA): An agency of the US Department of Transportation that funds highway planning programs.

<u>Federal Transit Administration (FTA):</u> An agency of the US Department of Transportation that funds transit planning and deployment programs.

Fiscal Year (FY): For California, the FY is the accounting period beginning July 1 and ending June 30. For Federal budget and accounting purposes the FY period begins October 1 and ends September 30.

<u>Focus Routes:</u> These routes are a subset of the 34 High Emphasis IRRS routes. They represent the ten corridors that should be the highest priority for completion to minimum facility standards in order to serve higher volume interregional trip movements.

<u>Free Flow Speed:</u> The average speed of vehicles on a given facility, measured under low-volume conditions, when drivers tend to drive at their desired speed and are not constrained by delay from traffic control devices.

<u>Freeway:</u> A divided arterial highway with full control of access and with grade separations at intersections. A freeway, as defined by statute, is also a highway in respect to which: (1) the owners of abutting lands have no right or easement of access to or from their abutting lands; or (2) such owners have only limited or restricted right or easement of access. This statutory definition also includes expressways.

Freeway and Express System (F&E): The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.

<u>Freeway-to-freeway Connection:</u> A single or multilane connection between freeways.

**Frontage Street or Road:** A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

<u>Functional Classification:</u> Guided by Federal legislation, refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, i.e., Principal Arterials, Minor Arterials and Major Collectors).

## **G**g

<u>Gap:</u> The time, in seconds, for the front bumper of the second of two successive vehicles to reach the starting point of the front bumper of the first.

<u>Geometric Design:</u> Geometric design is the arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

<u>Goods Movement:</u> The general term referring to the flow of commodities, modal goods movement systems and goods movement institutions.

<u>Grade:</u> As used in capacity analysis, grade refers to the average change in elevation on the segment under study, expressed as a percentage.

<u>Grade Separation:</u> A crossing of two highways or a highway and a railroad at different levels.

## Hh

<u>Headway (Highway):</u> The time in seconds between consecutive vehicles moving past a point, in a given lane, measured front to front

<u>High Emphasis Routes:</u> High Emphasis routes that are characterized as being the most critical Interregional Road System (IRRS) routes. More importantly, these routes are critical to interregional travel and the state as a whole.

<u>High Occupancy Vehicle (HOV):</u> Term for multi-occupant highway vehicles such as buses, jitneys, vans and carpools.

<u>Highway:</u> Term applies to roads, streets, and parkways, and also includes right-of-way, bridges, railroad crossings, tunnels, drainage

structures, signs, guard rails, and protective structures in connection with highways.

<u>Highway Advisory Radio (HAR):</u> An ITS technology that provides valuable information to travelers through prerecorded messages that contain traffic information, road conditions, chain requirements and road closures, etc. Transmission is generally accomplished through low-powered AM broadcast.

<u>Highway Capacity Manual (HCM):</u> Updated in 2000 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation (Level-of-Service) of transportation systems.

<u>Highway Classification:</u> For purposes of capacity analysis, separation of two-lane highways into Class I, II or III. Class I includes major interregional routes, Class II includes smaller links in the system and Class III includes segments of two-lane highway in smaller developed areas or communities.

<u>Highway Planting:</u> Vegetation placed for aesthetic, safety, environmental mitigation, or erosion control purposes, including necessary irrigation systems, inert materials, mulches and appurtenances.

<u>Highway Trust Fund:</u> Federal user fees on gasoline, etc. go into this fund. Used to reimburse states for Federal-aid projects.

<u>High Occupancy Vehicle (HOV) Lane:</u> Preferential or exclusive lane for high occupancy vehicles.

<u>Hydrocarbons (HC):</u> Incompletely burned or evaporated fuel or solvents, produced by mobile sources and industrial sources.



<u>Incident Management:</u> Technologies that allow transportation managers to identify and respond quickly to incidents on the highway system.

<u>Initial Study:</u> A preliminary analysis prepared by the lead agency to determine whether an environmental impact report (EIR) or negative declaration must be prepared pursuant to the California Environment Quality Act (CEQA).

<u>Intelligent Transportation Systems (ITS):</u>. Use of advanced sensor, computer, and electronic systems to increase the safety and efficiency of the transportation system.

<u>Interchange:</u> A system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between two or more roadways on different levels.

<u>Intersection:</u> A place where two roadways cross at-grade. Control devices may be located on one or more legs of the intersection.

<u>Intermodal:</u> The ability to connect, and make connections between modes of transportation.

 Intermodal
 Corridor
 of
 Economic
 Significance
 (ICES):

 Significant
 National
 Highway
 System
 Corridors
 that
 link

 intermodal
 facilities
 most
 directly, conveniently and efficiently to

 intrastate
 interstate
 and international markets

Intermodal Transportation Management System (ITMS): ITMS is an integral and fundamental tool used in system planning and advanced planning activities. The ITMS provides an

interactive, intermodal and multimodal, quick response transportation planning analysis tool for use in system planning and jointly with regional agencies.

<u>Interregional Road System (IRRS):</u> A series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreational areas and urban and rural regions.

Interregional Transportation Strategic Plan (ITSP): The ITSP identifies six key objectives for implementing the Interregional Improvement Program and strategies and actions to focus improvements and investments. This document also addresses development of the interregional road system and intercity rail in California, and defines a strategy that extends beyond the 1998 State Transportation Improvement Program (STIP).

<u>Intersection:</u> The general area where two or more roadways join or cross, which include roadside facilities for traffic movements in that area.

<u>Interstate Highway System:</u> The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The Interstate System also connects the US to internationally significant routes in Mexico and Canada.

**Island:** A defined area between traffic lanes for control of vehicle movements or for pedestrian refuge. Within an intersection a median or an outer separation is considered an island.

## Kk

**<u>Kilometer Post (KP):</u>** Using kilometers and counties, the KP system identifies specific and unique locations in the California highway system.

## LI

<u>Lane Numbering:</u> On a multilane roadway, the traffic lanes available for through traffic traveling in one direction are numbered from left to right when facing in the direction of traffic flow

<u>Left turn lane:</u> A storage area designated to only accommodate left turning vehicles.

<u>Level-of-Service (LOS):</u> A rating using qualitative measures that characterize operational conditions within a traffic stream and perception of those measures by motorists and passengers.

<u>Lifeline Route:</u> A route on the State Highway System that is deemed so critical to emergency response/life safety activities of a region or the state. It must remain open immediately following a major earthquake, or for which preplanning for detour and/or expeditious repair and reopening can guarantee the through movement of emergency equipment and supplies.

<u>Local Street or Local Road:</u> A street or road primarily for access to residences, businesses, or other abutting property.

<u>Local Transportation Commission (LTC):</u> A designated transportation planning agency for a county which is not within the jurisdiction of a statutorily created regional transportation planning agency or a council of governments.

## Mm

<u>Maintained Miles:</u> The length of a facility that is preserved and kept in the safe and usable condition to which it has been improved.

<u>Median</u>: The portion of a divided highway separating the traveled ways for traffic in opposite directions.

<u>Median Lane</u>: A speed change lane within the median to accommodate left turning vehicles.

<u>Memorandum of Understanding (MOU):</u> Formal structure for interagency cooperation.

**Merging:** The converging of separate streams of traffic into a single stream.

Metropolitan Planning Organization (MPO): By federal provision, the Governor designates this organization by principal elected officials of general-purpose local governments. MPOs are established to create a forum for cooperative decision-making. Each MPO represents an urbanized area with a population of over 50,000 people.

Minimum Turning Radius: The radius of the path of the outer front wheel of a vehicle making its sharpest turn.

<u>Mixed Flow:</u> Traffic movement having automobiles, trucks, buses and motorcycles sharing traffic lanes.

Mode: Types of transportation: e.g. auto, bus, rail, etc.

<u>Multimodal</u>: The availability of transportation options using different modes within a system or corridor.

<u>Multiple Lanes:</u> Freeways and conventional highways are sometimes defined by the total number of through traffic lanes in both directions. Thus, an 8-lane freeway has 4 through traffic lanes in each direction. Likewise, a 4-lane conventional highway has 2 through traffic lanes in each direction.

## Nn

National Environmental Policy Act (NEPA): 1969 legislation requiring all Federal agencies to prepare an environmental impact statement evaluating proposed Federal actions which may significantly affect the environment.

National Highway System (NHS): ISTEA established a 155,000-mile NHS to provide an interconnected system of principle arterial routes to serve major travel destinations and population centers, international border crossings, as well as ports, airports, public transportation facilities and other intermodal transportation facilities. The NHS must also meet national defense requirements and serve interstate and interregional travel.

National Network (NN) for Trucks: This network is comprised of the National System of Interstate and Defense Highways, examples are I-10, I-5 and I-80. STAA Trucks are allowed on the NN.

Nitrogen Oxides (NO<sub>x</sub>): Products of high-compression internal combustion engines, power plants and other large burners.

Non-Motorized Transportation Facility: That combination of vehicles and ways generally including bikeways bicycles, sidewalks, bridle paths and horses which permit the transport of people.

## **O**0

<u>Outer Separation:</u> The portion of an arterial highway between the traveled ways of a roadway for through traffic and a frontage street or road

# Pp

Particulate Matter (PM<sub>10</sub>): Mostly carbon particles much like soot; however, fine particles of dust, metals, asbestos and suspended droplets are also found. Produced by industry, motor vehicles and natural processes. Fugitive dust comes from such sources as agricultural tilling, construction, mining and quarrying, paved and unpaved road and wind erosion.

<u>Passing Lane:</u> A lane added to improve passing opportunities in one direction of travel on a two-lane highway.

<u>Peak:</u> 1. The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak. 2. The period during which the demands for transportation services is the heaviest.

<u>Peak Period Directional Split:</u> During the peak period, the directional distribution of traffic.

<u>Platoon:</u> A group of vehicles traveling together as a group, either voluntarily or involuntarily because of signal control, geometrics, lack of passing opportunities or other factors.

<u>Post-Mile (PM):</u> Using miles and counties, the PM system identifies specific and unique locations in the California highway system.

<u>Percent Time Spent Following (PTSF):</u> A performance measure used to estimate level of service on a two-lane highway. It is the average percentage of travel time that vehicles must travel in platoons behind slower vehicles due to the inability to pass.

<u>Prescriptive</u>: Type of easement that comes into existence without formal action because of long term historical use in a corridor. A prescriptive right cannot be established over land owned by a governmental entity.

<u>Programming:</u> Process of scheduling high-priority projects for development and implementation.

<u>Project Initiation Document (PID):</u> A report that documents agreement on the design concept, design scope, schedule and estimated cost of a project so that the project can be included in a future programming document. Reports include, among others, the PSR, PSSR, Combined PSR/PR, PEER and the NBSSR.

**Project Report:** Report summarizing the feasibility of needs, alternatives, costs, etc., of a proposed transportation project affecting state transportation facilities. Often project reports consist of a Transmittal Letter and a draft environmental document

<u>Public Participation:</u> The active and meaningful involvement of the public in the development of transportation plans and programs

<u>Public Transportation</u>: Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point or another. Routes and schedules may be determined through a cooperative arrangement.

## Rr

Ramp: A connecting roadway between a freeway or expressway and another highway, road, or roadside area.

**Ramp Metering:** A traffic management strategy which utilizes a system of traffic signals on freeway entrance and connector ramps to regulate the volume of traffic entering a freeway corridor. This is to maximize the efficiency of the freeway and thereby minimize the total delay in the transportation corridor.

**Recission:** California Transportation Commission (CTC) cancellation of a previously adopted highway route location.

<u>Region (Transportation Planning)</u> – A geographical area assigned to a Regional Transportation Planning Agency (RTPA) responsible for regional transportation planning.

Regional Transportation Plan (RTP): State-mandated documents to be developed biennially by all region transportation planning agencies (RTPAs). They consist of policy, action and financial elements.

Regional Transportation Planning Agency (RTPA): Created by AB 69 to prepare regional transportation plans and designated by the Business, Transportation and Housing (BT&H) secretary to receive and allocate transportation funds. RTPAs can be Councils of Government (COGs), Local Transportation Commissions (LTCs), Metropolitan Planning Organizations (MPOs), or statutorily-created agencies.

**Rehabilitation:** Activities which preserve the quality and structural integrity of a roadway by supplementing normal maintenance activities.

**Relinquishment:** A transfer of the State's right, title, and interest in and to a highway, or portion thereof, to a city or county.

Remote Atmospheric Weather Systems (RAWS): This ITS system collects atmospheric forecasting data to analyze weather patterns.

**Resurfacing:** A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.

**Ridesharing:** Transportation system management (TSM) technique providing the systems and management to facilitate carpooling, vanpooling, buspooling and increasing transit usage.

**Right-of-Way:** Real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.)

**Roadbed:** That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

**Roadside:** A general term denoting the area adjoining the outer edge of the roadbed. Areas between the roadbeds of a divided highway may also be considered roadside.

**Roadway:** That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Road Weather Information Systems (RWIS): This ITS system collects pavement temperature, visibility, wind speed and direction and precipitation data and presents the data in a useable format to transportation system operators, potentially for the travelling public.

## Ss

<u>Safety Index</u>: The traffic Safety Index is a tool for evaluating safety benefits which provides a measure of the accident dollars saved by the motorist expressed as a percentage of the sum of right-of-way (R/W) and construction costs.

<u>Safety Roadside Rest:</u> A roadside area provided for motorists to stop and rest for short periods. It includes paved parking areas, drinking water, toilets, tables, benches, telephones, information panels, and may include other facilities for motorists.

Scenic Corridor: A band of land which is visible from and generally adjacent to, but outside of, the highway right of way having scenic, historical, or other aesthetic characteristics.

Scenic Highway: An officially designated portion of the State Highway System traversing areas of outstanding scenic beauty and/or historic character. Designations include: All-American Road, National Scenic Byway, U.S. Forest Service Byway, BLM Back Country Byways, Historic Highway and State Scenic Highway.

<u>Segment:</u> A portion of highway identified for analysis that is homogenous in nature.

<u>Separate Turning Lane:</u> An auxiliary lane for traffic in one direction, which has been physically separated from the intersection area by a traffic island.

<u>Shoulder:</u> The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

<u>Signalized Intersection:</u> A place where two roadways cross and have a signal controlling traffic movements.

**Skew Angle:** The complement of the acute angles between two centerlines which cross.

<u>Spacing:</u> The distance between consecutive vehicles, in a given lane, measured front to front.

**Speed Change Lane:** An auxiliary lane, including tapered areas, primarily for the acceleration or deceleration of vehicles entering or leaving the through traffic lanes.

<u>State Freeway and Expressway System:</u> The Statewide system of highways declared by the Legislature to be essential to the future development of California.

State Highway Operation and Protection Program: A four-year program limited to projects related to state highway safety and rehabilitation.

<u>State Implementation Plan (SIP):</u> Plan required by the Federal Clean Air Act of 1970 to attain and maintain national ambient air quality standards.

<u>State Routes:</u> State highways within the State, other than Interstate and US routes, which serve intrastate and interstate travel. These highways can be freeways, expressways or conventional highways.

State Title: Property purchased by the State and held in fee title.

<u>State Transportation Improvement Program (STIP):</u> Biennial document, adopted by the California Transportation Commission (CTC), which provides the schedule of projects for develop over the upcoming five years.

<u>Surface Transportation Assistance Act Network (STAA):</u> The National Network (NN), Terminal Access (TA) and Service Access Route make up this network. These routes allow STAA trucks.

Surface Transportation Assistance Act (STAA) Trucks: This act required states to allow larger trucks on the National Network (NN) which is comprised of the Interstate State plus the non-Interstate System Federal-aid Primary System. "Larger trucks" includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KRPA) distance, (3) unlimited length for both vehicle combinations, and (3) width up to 102 inches.

## Tt

<u>Telecommuting:</u> The substitution, either partially or completely, of transportation to a conventional office through the use of computer and telecommunications technologies (e.g., telephones, personal computers, modems, facsimile machines, electronic mail)

<u>Terminal Access (TA) Routes:</u> Terminal Access routes are portions of State routes, local roads, that can accommodate STAA trucks. TA route allow STAA trucks to (1) travel between NN routes, (2) reach a truck's operating facility, or (3) reach a facility where freight originates, terminates, or is handled in the transportation process.

<u>Terrain:</u> The surface features of an area of land; topography. In capacity analysis, classification into one of three categories: flat, rolling or mountainous.

<u>Three C Process (3C):</u> "Continuing, cooperative and comprehensive" planning process. Required of metropolitan planning organizations (MPOs) as a condition for receiving federal capital or operation assistance.

Traffic Accident Surveillance and Analysis System (TASAS):
A system that provides a detailed list and/or summary of accidents that have occurred on highways, ramps, or intersections in the State Highway System, Accidents can be selected by location, highway characteristics, accidents data codes or any combinations of these.

<u>Traffic Conditions:</u> Any characteristics of the traffic stream that may affect capacity or operation, including the percentage composition of the traffic stream by vehicle type and driver

characteristics (such as the differences between weekday commutes and recreational drivers).

<u>Traffic Lane:</u> The portion of the traveled way for the movement of a single line of vehicles.

<u>Traffic Markings:</u> All lines, words, or symbols (except signs) officially placed within the roadway to regulate, warn, or guide traffic.

<u>Traffic Sign:</u> A device mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic.

<u>Traffic Signal:</u> A traffic control device regulating the flow of traffic with green, yellow and red phases.

<u>Transit:</u> Generally refers to passenger service provided to the general public along established routes with fixed or variable schedules at published fares. Relate terms include: public transit, mass transit, public transportation, urban transit and paratransit.

<u>Transportation Concept Report (TCR):</u> Planning document that identifies current operating conditions, future deficiencies, route concept, concept level of service (LOS) and conceptual improvements for a route or corridor.

<u>Transportation Control Measure (TCM):</u> A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances and the use of cleaner burning fuels in motor vehicles.

<u>Transportation Demand Management (TDM):</u> "Demand-based" techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours.

<u>Transportation Equity Act for the 21st Century (TEA21):</u> As an addition to Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, TEA21, which was enacted June 9, 1998, authorizes highway, highway safety, transit and other surface transportation programs for the following 6 years.

<u>Transportation Improvement Program (TIP):</u> Federally required annual schedule of projects for transportation development for the upcoming five years. A project must be in the appropriate regional-Federal TIP to receive Federal or CTC funding.

<u>Transportation Management Center (TMC):</u> A focal point that can monitor traffic and road conditions, as well as train and transit schedules, and airports and shipping advisories. From here, information about accidents, road closures and emergency notification is relayed to travelers.

Transportation Permits: The Department of Transportation has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight and loading of vehicles contained on Division 15 of the California Vehicle Code. Requests for such special permits requires the completion of an application for a Transportation Permit from the office Traffic Operations-Transportation Permits. Route Classes for length are labeled yellow, green, blue, brown and red. Route Classes for weight are labeled purple, orange and green. See http://www.dot.ca.gov/hq/traffops/permits/ for more information

<u>Transportation Stakeholder:</u> In transportation, stakeholders include FHWA, CTC, RTPAs, transportation departments, transportation commissions, cities and counties, Native American Tribal Governments, economic development and business

interests, resource agencies, transportation interest groups, the public and the Legislature.

<u>Transportation</u> <u>System Development Program (TSDP):</u> A TSDP identifies a reasonable, comprehensive and effective range of transportation improvements on state highways. It is the Department's statement of priorities for improvements in negotiating and joint planning with regional agencies.

<u>Transportation System Management (TSM):</u> TSM is 1) a process oriented approach to solving transportation problems considering both long and short range implications; and 2) a services and operations process oriented in which low capital, environmentally-responsive, efficiency-maximizing improvements are implemented on existing facilities.

<u>Travel Way:</u> The portion of the roadway for the movement of vehicles, exclusive of shoulders.

**Troposphere Ozone:** Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, solvents, petroleum processing and storage and pesticides.

<u>Two Way Stop Control:</u> Traffic control at an intersection where the minor approaches are controlled by stop signs but the major street is not.

<u>Typical Section:</u> Depiction of the basic (or typical) design elements/features for an existing or planned facility. Typical sections can be prepared for a variety of facilities, including: highway sections, lane transition areas, medians, interchanges, pavement structural sections, bike paths and drainage systems.



<u>US Department of Transportation</u>: The principal direct Federal funding agency for transportation facilities and programs. Includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA), and other.

<u>US Route:</u> A network of highways of statewide and national importance. These highways can be freeways, expressways or conventional highways.



**Vehicle Miles Traveled (VMT):** Used in trend analysis and forecasts. (1) On highways, a measurement of the total miles traveled in all vehicles in the area for a specific time period. It is calculated by the number of vehicles multiplied by the miles traveled in a given area or on a given highway during the time period. (2) In transit, the number of vehicle miles operated on a given router or line or network during a specific time period.

<u>Vehicle Occupancy:</u> The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

<u>Vista Point:</u> A paved area beyond the shoulder, which permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water and telephones may be provided.

<u>Volume:</u> The number of vehicles passing a given point during a specified period of time.

<u>Volume/Capacity Ratio (V/C Ratio):</u> The ratio of flow rate to capacity for a transportation facility.

## W<sub>W</sub>

<u>Weaving:</u> The crossing of traffic streams, moving in the same general direction, accomplished by merging and diverging.

**Weaving Section:** A length of roadway over which traffic streams cross paths through lane-changing maneuvers, at one end of which two one-way roadways merge and at the other end of which they separate.

<u>Weigh-in Motion (WIM):</u> Technology that determines a vehicle's weight without requiring it to stop on a scale.

## Appendix B: Public Outreach Plan

#### **Siskiyou County**

Incorporated Cities: Dorris, Dunsmuir, Etna, Fort Jones, Montague, Mt. Shasta City, Tulelake, Weed and Yreka.

The Siskiyou County Regional Transportation Planning Agency is responsible for transportation planning in Siskiyou County. The RTPA is governed by a six member Local Transportation Commission composed of the following members: Dorris City Council (1), Fort Jones City Council (1), Yreka City Council (1), Siskiyou County Board of Supervisors (3). RTPA staff is provided by the Siskiyou County Public Works Department. While the RTPA does not have a standing Technical Advisory Committee, there is a League of Cities involving all nine cities that serves a similar purpose.

Date August 22, 2001	Format Meeting	Key Contacts Siskiyou County Public Works Dave Gravenkamp, Director of Public Works 305 Butte Street Yreka, CA 96097	Other Attendees Don Anderson, Caltrans, Scott White, Caltrans Bruce Gardner, Caltrans
October 29, 2001	Meeting	City of Weed Officials Bill Hoy, Supervisor Earl Wilson, City Manager M. Kelly McKinnes, Finance Officer Craig Sharp, Director of Public Works Charlie Byrd, Siskiyou County Sheriff Weed City Hall 550 Main Street Weed, CA 96094	Don Anderson, Caltrans Scott White, Caltrans Bruce Gardner, Caltrans
November 15, 2001	Meeting	City of Dorris Representatives Jim Bray, Consultant Morgan Eastlick, Consultant Bray Engineering 220 Butte Street Yreka, CA 96097	Scott White, Caltrans Bruce Gardner, Caltrans
May 22, 2002	Public Workshop	Weed City Hall 550 Main Street Weed, CA 96094	Nicholas Deal, Caltrans Kathy Grah, Caltrans (30 public attendees)
May 23, 2002	Public Workshop	Dorris City Hall 629 Alder Street Mt. Shasta, CA 96067	Nicholas Deal, Caltrans Kathy Grah, Caltrans Carl Anderson, Caltrans (12 public attendees)
February 4, 2003	Presentation	Siskiyou County Transportation Commission 311 Fourth Street Yreka, CA 96097	Nicholas Deal, Caltrans Scott White, Caltrans
April 23, 2003	Meeting	City of Weed Officials Earl Wilson, City Manager Craig Sharp, Director of Public Works 550 Main Street Weed, CA 96094	Scott White, Caltrans Rachel Falsetti, Caltrans Amber Kelley, Caltrans

#### CALIFORNIA INDIAN RESERVATIONS AND RANCHERIAS

Native American tribes are separate and independent political communities within the territorial boundaries of the United States. Tribes promulgate and administer their own laws. In addition to standard governmental functions such as regulating, taxing and delivering services, tribal governments are also responsible for the development, management and operation of tribal economic enterprises. There are no tribal governments along US 97.

Date Format Key Contacts Other Attendees

April 22, 2002 Letter Shasta Nation
P.O. Box 1054
Yreka, CA 96097

#### **OTHER PRIVATE & PUBLIC ENTITIES**

The following private and public entities were contacted during the development of the TCR.

Butte Valley Chamber of Commerce Siskiyou County Planning Department

Butte Valley / Tulelake Rural Health Clinic

Butte Valley RV Park

Siskiyou County Visitors Bureau
Siskiyou Workforce Connection
Butte Valley High School
Siskiyou County Airports
California Trucking Association
Siskiyou County Administration

Cal-Ore Telephone Company
Cal Works Employment Services
Siskiyou County Public Works
Siskiyou County Road Department

CDF Siskiyou Unit Siskiyou County Sheriff Department CHP - Field Operation Area Office Union Pacific Railroad

City of Dorris USFS Klamath National Forest City of Weed - Police Department Weed Revitalization Committee

City of Weed - Planning Department Weed Chamber of Commerce
City of Weed - City Council Whitesell Manufacturing

City of Weed – City Council Whitesell Manufacturing
City of Weed – City Administration
City of Weed – Public Works

College of the Siskiyous

Department of Fish & Game
Dorris Agricultural Inspection Station

Dorris Towing & Auto Parts Service Dorris Lions Club

Grass Lake Maintenance Station

Klamath National Forest - Goosenest Ranger Station

Lake Shastina Community Services District

Natural Resources Conservation

City of Weed – Fire Department

Dorris Lumber & Moulding

Northern Valley Catholic Social Service

Onarheim Trucking

Ore-Cal Resource Conservation & Development Area

Council

Personnel Preference

**Roseburg Forest Products** 

Shasta Nation

Siskiyou County Air Pollution Control District

Siskiyou County Board of Supervisors

Siskiyou County Economic Development Council

## **Appendix C: Capacity Analysis and Level of Service**

#### Methodology:

The standard reference in highway capacity analysis is the <u>Highway Capacity Manual 2000</u> prepared by the Transportation Research Board (National Research Council, Washington, D.C.). The Highway Capacity Manual 2000 (HCM 2000) is a collection of the state-of-the-art techniques for estimating the capacity and determining the level of service for transportation facilities. The HCM 2000 represents a systematic and consistent basis for evaluating transportation facilities with procedures that are applicable nation-wide. The HCM 2000 builds upon and expands the procedures and methodologies put forth in the 1950, 1965, 1985, 1994, 1997 manuals as well as other related research projects.

#### Capacity Analysis:

The set of procedures and methodologies used for estimating the traffic-carrying ability of various transportation facilities is broadly referred to as capacity analysis. A principal objective of capacity analysis is to estimate the number of vehicles that a facility can accommodate during a specified period of time. Capacity analysis is also used to estimate the maximum amount of traffic that a facility can accommodate while maintaining a prescribed level of operation. Common outputs of capacity analysis are estimates of the quality of operation (level of service) for a given facility.

#### Capacity:

The capacity of a facility is the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or uniform section of lane or roadway during a given time period under prevailing roadway, traffic and control conditions. It represents the flow rate that can be achieved during peak periods of demand. Capacity is affected by a number of factors such as lane and shoulder widths, density of access points, interchange spacing, grade, and types of vehicles in the traffic stream. Capacity values are determined differently by mode (auto, bus, pedestrian, bicycle) and by facility (freeway, highway, urban street, intersection, etc.).

#### Level of Service:

Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility analyzed. Letters designate each level, from "A" to "F", with LOS "A" representing the best operating conditions and LOS "F" the worst.

#### Methodologies:

The HCM 2000 contains analytical methodologies for the following situations: urban streets, signalized intersections, unsignalized intersections, pedestrians, bicycles, two-lane highways, mulitlane highways, freeway facilities, basic freeway segments, freeway weaving, ramps, interchanges and transit. *Capacity and level of service is determined differently for each facility type, so direct comparisons across facility types should not be made.* 

#### Two-Lane Highway Methodology – Chapter 20, HCM 2000:

The two-lane highway methodology is applicable to US Route 97. A two-lane highway is an undivided roadway with two lanes, one for use by traffic in each direction. On a two-lane undivided highway, traffic flow is affected by a number of factors, including geometric conditions (curvature, lane widths, shoulder widths, etc.), sight distance and grade. Traffic flow in one direction is also influenced by traffic flow in the other direction. Travel speeds fall and time spent following other vehicles rises as volumes increase and traffic in the opposing direction reduces opportunities to pass.

The performance measures used to determine level of service for two-lane highways are percent time spent following, average travel speed and percent of expected speed. Percent time spent following is the average percentage of travel time that vehicles must travel in platoons behind slower vehicles due to the inability to pass. Average travel speed is the average of the travel time of all vehicles over a designated interval. Percent of expected speed is the ratio of average travel speed to free flow speed (approximately equal to posted speed) over a designated interval.

For purposes of analysis, two-lane highways are divided into three classes based on the primary type of use and driver expectations:<sup>1</sup>

Class I -

These are two-lane highways on which motorists expect to travel at relatively high speeds. Two-lane highways that are major inter-city routes, primary arterials connecting major traffic generators, or primary links in state or national highway networks generally are assigned to Class I.

#### Class II -

These are two-lane highways on which maintaining high travel speeds are not necessarily the most important objective of motorists. Two-lane highways that serve as scenic or recreational routes, are not primary arterials, or pass through rugged terrain generally are assigned to Class II.

#### Class III -

Class III is applicable in situations where a two-lane highway (otherwise class I or II) passes through a small town or other developed area. In these situations motorists primarily want to proceed at a reasonable speed and generally do not expect to have an opportunity to pass.

The level of service (LOS) for Class I highways is defined in terms of both percent time spent following and average travel speed. For Class II facilities, the LOS is defined only in terms of percent time spent following. The LOS on Class III segments is defined in terms of percent of expected speed. The tables below provide the criteria (break-points) for level of service for each facility type.

I	evel of Service Criteria for Two-Lane Highways in C	Class I
LOS	Percent Time Spent Following	Average Travel Speed (mi/h)
A	<u>&lt;</u> 35	> 55
В	> 35-50	> 50-55
С	> 50-65	> 45 –50
D	> 65-80	> 40-45
E	> 80	<u>&lt;</u> 40
F	Vehicle flow rate exceeds capacity	

Level of Service Criter	Level of Service Criteria for Two-Lane Highways in Class II  LOS Percent Time Spent Following		
LOS			
A	<u>≤</u> 35		
В	> 35-50		
С	> 50-65		
D	> 65-80		
E	> 80		
F	Vehicle flow rate exceeds capacity		

Level of Service Criteria for	Two-Lane Highways in Class III
LOS	Percent of Expected Speed
A	> .92
В	> .83
С	> .75
D	> .67
E	> .58
F	< .58

For purposes of capacity analysis, US Route 97 was given the following classifications:

US Route 97 Clas	sification for Capacity Analysis
Class	Segments
I	2,3,4,5,6,7,8,9,11
II	None
III	1 and 10

1. The methodology in Chapter 20 of the HCM 2000 addresses two classes of two-lane highways, Class I and Class II. In most instances, the procedures for the two classes provide satisfactory results. In small developed communities, however, where typical travel speeds are less than 45 miles per hour, neither the Class I nor the Class II methodology can be applied successfully. For this reason, the California Department of Transportation, District 2 Office of System Planning utilizes the Florida Department of Transportation (FDOT) Class III methodology contained in the Florida Department of Transportation Quality/Level of Service Handbook.

## **Appendix D: Route Designations**

#### FEDERAL DESIGNATIONS

National Highway System (NHS)

Added: 1995

Legislation: National Highway System Designation Act

The purpose of the NHS is to provide an integrated national highway system that serves both urban and rural America; to connect major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; to meet national defense requirements; and to serve interstate and interregional travel.

#### Strategic Highway Network (STRAHNET)

Added: 1990

Legislation: Federal Defense Act

The purpose of STRAHNET is to provide a network of highways that are important to the United States strategic defense policy and provide defense access, continuity, and emergency capabilities for defense purposes.

#### Surface Transportation Assistance Act (STAA) Network

Added: 1982

Legislation: Surface Transportation Assistance Act (STAA)

The STAA Act requires states to allow certain longer trucks on a network of Federal highways, referred to as the National Network (NN). The NN is comprised of the Interstate System plus the non-Interstate Federal-aid Primary System. "Larger trucks" includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KPRA) distance, (3) unlimited length for both vehicle combinations, and (4) widths up to 102 inches. STAA trucks are limited to the NN, Terminal Access Routes, and Service Access routes (STAA Network). For further information, regarding truck classifications, please see State Classifications-California Truck Route Classifications.

<u>National Network (Federal):</u> The National Network (NN) is primarily comprised of the National System of Interstate and Defense Highways, for example I-5. STAA trucks are allowed on the NN.

Terminal Access (State, Local): Terminal Access (TA) routes are portions of State Routes, or local roads, that can accommodate STAA trucks. TA allows STAA trucks to (1) travel between NN routes, (2) reach a truck's operating facility, or (3) reach a facility where freight originates, terminates, or is handled in the transportation process.

Service Access (State, Local): STAA trucks may exit the NN to access those highways that provide reasonable access to terminals and facilities for purposes limited to fuel, food, lodging, and repair, when that access is consistent with safe operation. The facility must be within one road mile of an exit from the NN and that exit must be identified by signage.

#### STATE CLASSFICATIONS

#### • State Highway System

Added: Statues of 1964

Legislation: In the California Streets and Highways Code-Sections 300-635

The intent of the legislature was to identify a set of routes in the State Highway System that serve the state's heavily traveled rural and urban corridors, connect the communities and regions of the state, and support the state's economy by connecting centers of commerce, industry, agriculture, mineral wealth, and recreation.

#### The Interregional Road System is a subset of the State Highway System.

**Interregional Road System (IRRS):** 

Added: 1989

**Legislation:** Transportation Blueprint for the Twenty-first Century

In the California Streets and Highways Code-Sections 163-164.2

The IRRS was conceived as part of a larger effort to address the critical transportation funding and development needs of the state. The legislation required the California Department of Transportation to define IRRS routes and create an interregional road system plan. IRRS is a series of interregional state and highway routes, outside the urbanized areas, that provide access to, and links between, the state's economic centers, major recreation areas, and urban and rural regions. In 1989 the IRRS plan identified 81 state highway routes, or portions of routes, that serve the interregional movement of people and goods. Most interstates were included in the system, and all major interregional routes (conventional, expressway and freeway). Six additional routes have been added to the system since that time by locally sponsored legislation, so there are currently 87 IRRS routes in statute.

#### High Emphasis Routes are a subset of the IRRS.

**High Emphasis Route:** 

Added: 1990 IRRS Plan; 1998 Interregional Transportation Strategic Plan (ITSP)

Legislation: None

Due to the large number of routes and capacity improvements needed on the IRRS, the 1990 IRRS plan identified a subset of the 87 routes as being the most critical routes and identified them by the term "High Emphasis Routes." High Emphasis Routes are a priority for programming and construction. Originally, there were 13 routes listed as High Emphasis Routes in the 1990 IRRS Plan. The 1998 ITSP kept the original 13 High Emphasis routes and added an additional 21 routes to the category for a total of 34. In some cases, the High Emphasis routes in the ITSP are a series of joined portions of routes that constitute a major logical transportation corridor. An example of a High Emphasis Route corridor that is comprised of major portions of a primary route but also includes sub-portions of other routes is SR 36/SR 44/SR 299.

Focus Routes are a subset of the High Emphasis Routes.

#### Focus Routes-Interregional Transportation Strategic Plan:

Added: 1998 Interregional Transportation Strategic Plan (ITSP)

Legislation: None.

The term "Focus Route" is a phrase specific to the ITSP and represents a subset of the 34 High Emphasis Routes. The routes represent the 10 IRRS corridors that should be of the highest priority for completion to minimum facility standards by 2020. Focus routes serve as a system of high volume primary arteries to which lower volume and facility-standard state highway routes can connect for purposes of longer interregional trips and access into statewide Gateways. All Focus Routes are on the NHS, Freeway and Expressway System (F & E), and are STAA Truck or Truck Terminal Routes

#### Intermodal Corridor of Economic Significance (ICES)

Added: Statues of 1994

California Streets and Highways Code-Sections 2190-2191

The ICES system was created in response to State legislation that required the Department to identify significant National Highway System corridors that link intermodal facilities most directly, conveniently, and efficiently to intrastate, interstate, and international markets. To be included in the ICES system, a route should provide access between major freight intermodal facilities and serve freight traffic with the NAFTA countries of Canada and Mexico, as well as the Pacific Rim and other U.S. trade markets.

#### Life Line Routes

Added: California Department of Transportation Strategic Plan-1994.

Not in legislative statues.

A Lifeline Route is a route of the State Highway System that is deemed critical to emergency/life safety activities of a region or the state. The route must remain open immediately following a major earthquake, or can be reopened fairly quickly by following a predetermined disaster response plan. The focus is on highly critical routes that allow for immediate movement of emergency equipment and supplies into a region or through a region.

#### Freeway and Expressway System (F & E)

Added: Statues of 1959

California Streets and Highways Code-Sections 253.1-253.8

The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F & E System has been constructed with a large investment of funds in order to control access, and to ensure the safety and operational integrity of highways.

#### • California Truck Route Classifications

Added: AB 66 (1983) and SB 2322 (1986)

California Vehicle Code-Sections 35400-35414

"California Legal" trucks can use the STAA Network and California Legal routes. The route classifications are listed below and see additional STAA designations under "Federal Designations".

<u>California Legal (State)</u>: California Legal routes are State routes that allow California Legal-size trucks. STAA trucks are not allowed on these routes because of limiting geometrics, such as sharp curves and/or lack of turn-around space.

<u>California Legal-Advisory (State)</u>: California law allows regulatory prohibition of a 38-foot KPRA or greater where posted in black-on-white. However, many California legal routes cannot safely accommodate California Legal-size trucks with a KPRA less than 38 feet, due to limiting geometrics such as sharp turns and limited highway width. Although California Legal trucks may travel on these segments, the driver is legally responsible for unsafe offtracking (crossing the centerline or driving on shoulders and sidewalks).

Restricted (Federal, State, Local): Some route segments have restrictions on certain truck or loads, such as gross weight, number of axles or hauling of flammable materials or explosives. Restrictions on federal or State routes are listed on the Caltrans Truck Route List.

## **Appendix E: Scenic Designations**

#### SCENIC ROUTES

Scenic byways can be designated at the local, state or national level. The following scenic designations are listed in hierarchical order from the most restrictive to least restrictive.

American Byways (Federal)

Added: Intermodal Surface Transportation Efficiency Act (ISTEA) and reauthorized in under the Transportation Equity Act (TEA) for the 21rst Century.

Legislation: 1991, 1998

Under the National Scenic Byways (NSB) Program, the U.S. Secretary of Transportation recognizes certain roads as NSBs or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 72 such designated byways in 32 states. The FHWA promotes the collection as America's Byways. These designations provide Federal funding opportunities.

All-American Road: To receive an All-American Road designation, a road must possess multiple intrinsic qualities that are nationally significant and contain one-of-a-kind features that do not exist elsewhere. The road or highway must also be considered a 'destination unto itself.' That is, the road must provide an exceptional traveling experience so recognized by travelers that they would make a drive on the highway a primary reason for their trip.

National Scenic Byway (NSB): To be designated as a NSB, a road must possess at least one of the six intrinsic qualities. The significance of the features contributing to the corridor's intrinsic qualities must be recognized throughout a multi-state region.

State Scenic Byway (State)

Added: 1963

Legislation: In the California Streets and Highways Code Sections-260-284

The purpose of California's Scenic Highway Program is to preserve and protect highway corridors from change. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. There are minimum requirements for scenic corridor protection: (1) Regulation of land use and density of development; (2) Detailed land and site planning; (3) Control of outdoor advertising; (4) Careful attention to and control of earthmoving and landscaping; and (5) Careful attention to design and appearance of structures and equipment. This designation provides no funding opportunities.

United States Department of Agriculture U.S. Forest Service Scenic Byway (Federal)

Added: 1988 Legislation: None

These routes are designated as "U.S. Forest Service Scenic Byways" and can consist of a combination of Federal, Interstate, State and County roads. A local jurisdiction turns in an application to the U.S. Forest Service office. The U.S. Forest Service, using a public participation plan process, decides if a route qualifies, and processes the designation. To qualify routes must showcase the outstanding scenery of the National Forest System, interpret the management activities of National Forests as well as the cultural and national values and attractions, and cultivate partnerships with local communities and organizations to enhance rural economic diversity. This designation provides no funding opportunities.

Officially Designated County Scenic Highway

Added: 1989 Legislation: None

A county may elect to participate in the State Scenic Highway Program or nominate a county road as a County Scenic Highway (the nomination process is the same). This designation provides no funding opportunities.

Bureau of Land Management (BLM) Back Country Byways

Added: 1989 Legislation: None

The BLM manages 17.1 million acres of public lands in California. The BLM is the custodian of the public land records for the U.S. Government. As a part of the BLM's management plan, a National Country Byway program was developed. Within District 2, there are several BLM facilities that offer opportunities for the public to hike, bicycle, observe wildlife, and drive through. The BLM Back Country Byways Program does not appear to impact the State Highway System except for signage issues. This designation provides no funding opportunities.

Historic Highways Program

Added: 1993

Legislation: California Assembly Concurrent Resolution No. 19-Relative to Historic U.S. 99

Requires the California Department of Transportation, upon application by an interested local agency or private group, to identify any section of former U.S. Highway 99 that is still a publicly maintained highway, and to designate that section as "Historic U.S. Highway 99." The Historic Highway program does not appear to impact the State highway System with the possible exception of signage issues and possible TEA project proposals. This designation provides no funding opportunities.

Blue Star Memorial Highways

Added: 1947

egislation: Segments are added by Senate Concurrent Resolutions, Assembly Concurrent Resolutions or Senate Resolutions.

After World War II, a nationwide movement was started to pay tribute to the nation's armed forces, by designating various State and national routes as "Blue Star Memorial Highways." In 1945, the National Council of State Garden Clubs, Inc. approved the Blue Star Memorial Highway Marker program. California Garden Clubs, Inc. accepted the program in 1947, when the California Legislature designated Highway 40 (now SR 80) and Highway 99. The Office of State Landscape Architecture is responsible for coordinating the Blue Star Memorial Program. Caltrans performs minor maintenance activities on the markers.

# **Appendix F: Air Quality**

#### Air Quality

Air quality is a general term used to describe various aspects of the air that plants and human populations are exposed to in their daily lives. A variety of contaminants including particulates (PM10) and gaseous pollutants such as carbon monoxide (CO), nitrogen oxides (NOX), hydrocarbons (HC) and troposphere ozone (O3) can degrade air quality.

The Federal Clean Air Act (CAA) forms the basis for the national air pollution control effort. A basic element of the CAA is the National Ambient Air Quality Standards (NAAQS), which require that certain pollutants do not exceed specified levels. Areas with levels that exceed the standard for specific pollutants are designated as "non-attainment areas." In order to receive transportation funding or approvals from the Federal Highway Administration (FHWA) or Federal Transit Administration (FTA), State and local transportation agencies in a "non-attainment area" must meet conformity requirements set forth in the CAA.

US 97 is located within the Northeast Plateau air basin. Currently, the air basin is classified as attainment for ozone and PM<sub>10</sub> for Federal CAA. Siskiyou County does not meet the State standard for PM<sub>10</sub>. Table 18 provides general information regarding air quality designations. Specific air quality information should be obtained from the District 2 Regional/Air Quality Planning Office or appropriate Air Quality District (Siskiyou County Air Pollution Control District).

		Table 18: Air	Quality	Design	ations			
County	Air Basin	Air Quality District	-					
			Ozone -1 hour	Ozone -8 hour	PM <sub>10</sub>	Ozone -1 hour	Ozone -8 hour	PM <sub>10</sub>
Siskiyou	Northeast Plateau	Siskiyou County APCD	A	A	NA	UC/A	UC/A	UC

NA=Nonattainment (Does not meet standard)

A=Attainment (Meets standard)

UC=Unclassified (Not measured)

\*Pending Nonattainment Designation

Sources: Environmental Protection Agency and Air Quality Management Districts

		Appendix G		Alternate Facilities near United State Route 97	ite Route 97		
Seg	Co	Street	From	То	Functional Class	Length Miles	AADT
1	SIS	Main Street	US 97	North Davis Avenue	Rural Local	0.460	6523
2	SIS	Lincoln Avenue	26 SN	Union Street	Rural Local	0.430	1375
2	SIS	Union Street	Lincoln Avenue	California Street	Rural Local	0.310	1644
2	SIS	Angel Valley Road	California Street	0.08 miles south of US 97	Rural Local	0.360	2512
3	SIS	Angel Valley Road	0.08 miles south of US 97	26 SN	Rural Minor Arterial	080'0	2528
3	SIS	Big Springs Road	26 SN	99-97 Cutoff	Rural Major Collector	11.870	1255
5	SIS	99-97 Cutoff	I-5	26 SN	Rural Major Collector	18.820	1675
7	SIS	Tennant Road	26 SN	Haight Mountain Road	Rural Minor Collector	8.600	155
6	SIS	Old State Highway	Tennant Road	26 SN	Rural Minor Collector	16.830	320
6	SIS	Ball Mountain Little Shasta Road	West Butte Valley Road	26 SN	Rural Minor Collector	3.050	320
6	SIS	Ball Mountain Little Shasta Road	26 SN	Old State Highway	Rural Minor Collector	2.300	320
6	SIS	Meiss Lake Sams Neck Road	Cook Campbell Road	26 SN	Rural Minor Collector	2.750	320
6	SIS	Meiss Lake Sams Neck Road	26 SN	Old State Highway	Rural Minor Collector	0.250	320
10	SIS	Butte Street	4 <sup>th</sup> Street (US 97)	1 <sup>st</sup> Street	Rural Minor Collector	0.300	465
10	SIS	1st Street	Butte Street	Main Street (US 97)	Rural Minor Collector	0.140	806

## **Appendix H: Local and Regional Plans**

The following documents were used during the preparation of the District 2 US Route 97 TCR:

#### **Regional Transportation Plan:**

Siskiyou County Regional Transportation Plan, 2001

#### **General Plans:**

Siskiyou County General Plan, 1980 Weed General Plan, 1987 Dorris General Plan, 1992

#### **Other Documents:**

California Fast Facts, California Department of Tourism, 2001 Economic and Demographic Profile Series, 2001 (Siskiyou County) Oregon Department of Transportation, U.S. Highway 97 Corridor Strategy, 1995

#### **RESOLUTION NO. 03-13**

# SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION Concurring with the transportation concept report for U.S. Route 97

WHEREAS, the Siskiyou Local County Transportation Commission is the Regional Transportation Planning Agency for Siskiyou County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and State highway system; and

WHEREAS, the California Department of Transportation, District 2 (District) is responsible for the planning, construction and operation of the State Highway system, which includes the functional relationship between the State highway system and local road system;

WHEREAS, District 2 in cooperation with the Siskiyou County Local Transportation Commission has prepared a Transportation Concept Report for US Route 97 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the US Route 97 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Native American Tribes, the general public and many other organizations; and

WHEREAS, the US Route 97 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

WHEREAS, the US Route 97 Transportation Concept Report also identifies improvements on or near the State highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Transportation Concept Report will require funding and delivery partnerships between the District and its local and regional partners.

**NOW, THEREFORE, BE IT RESOLVED** by the Siskiyou County Local Transportation Commission that the US Route 97 Transportation Concept Report presents a balanced and logical concept for the development and operation of US Route 97 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the US Route 97 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program and Interregional Transportation Improvement Program.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the Executive Director, Brian McDermott is hereby authorized to sign the "Concurrence" block on the signature sheet for the US Route 97 Transportation Concept Report

PASSED AND ADOPTED by the Siskiyou County Local Transportation Commission at a regular meeting of said Commission held on the 14th day of October, by the following vote:

CHAIRPERSO

AYES: Andreatta, Erickson, Hoy, McCulley, Smith, Veale

NOES: None ABSENT: None

Brian McDermott, Executive Director